The Quest For A Resilient And Agile Supply Network

Benchmark Report

By Brian Kilcourse and Steve Rowen, Managing Partners

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Executive Summary

Key Findings

Today, retail supply chains are fragile, and **agility** (the ability to quickly adjust to changes in demand) and **resiliency** (the ability to respond to supply chain shocks) have become boardroom issues, even while challenges on the consumer side are still being addressed. This report analyzes both sides of the problem: surveying 87 qualified retailers and over 1,000 US-based shoppers to gain their insights:

The following are some of the highlights of what they told us:

- When it comes to external **Business Challenges,** retailers express concerns *bordering on alarm* that legacy supply chains cannot support the growth in their businesses. <u>81% say they are growing faster than their supply chains can sustain</u>. Even more, they suspect that all the variable costs associated with supporting new consumer shopping behaviors are undermining profitability – and **raising retail prices to cover those variable costs is not a workable solution**. They are in a very difficult position.
- While shoppers grow frustrated, and report that they feel little has been done to solve for this growing host of problems, retailers do feel as though they are making real progress on the *planning* side. In the **Opportunities** section of this report (starting on page 16), 57% of retailers say improvements in forecasting analytics and the new data available to retailers have had a profound impact on the precision with which planners can forecast consumer demand.
- Despite being presented with a long list of **Organizational Inhibitors** to best identify what's keeping them from doing more (page 23), **nearly half of the retailers in our study select the lack of top-level support as a top-tier challenge**. With all of the attention supply issues are currently receiving, how can this be? The answer relates to measurement tools: <u>41% of retailers say the metrics they use to gauge success are old and irrelevant</u>. Many executives likely have no idea how poorly their own supply chains are performing, as metrics based in "efficiency ratings" may be telling them everything is just fine.
- It is surprising how quickly artificial intelligence and machine learning have become high-value technologies for retailers. In the wake of all the changes and disruptions that have occurred since 2020, retailers are viewing AI/ML as the best technology to help them address several nagging challenges – but most prominently, *improved forecasting.* In fact, 81% of the best performing retailers have already begun implementation of some type AI-based forecasting **Technology Enabler** to develop multiple demand generation scenarios. This analysis begins on page 27.

Based on our findings, we also offer several in-depth and pragmatic suggestions on how retailers should proceed. These recommendations can be found in the **Bootstrap Recommendations** portion of the report.

We certainly hope you find the data and insight valuable,

Brian Kilcourse and Steve Rowen

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Research Overview

Why We Conducted This Study

RSR's supply chain benchmark reports have alternatively focused on either the *supplier side* of the supply chain (how goods are brought to market), or the *consumer side* (how goods are put into the hands of consumers). Before the global pandemic hit in 2020, retailers were focused primarily on the consumer side: understanding the effects that new consumer shopping behaviors and order fulfillment options had on the stores and the DC's, "last mile" logistics, and on demand and supply chain planning. That focus was a direct response to innovative competition like Amazon and Walmart.

RSR's observations at that time can be summed up this way: as new consumer shopping and fulfillment options gained popularity, the new costs associated with providing those options tended to undermine per-order profitability, while at the same time, increasingly fickle consumer demand was undercutting retailers' abilities to "buy big" to optimize the cost of goods.

Retailers' perspectives seemed to be that while the consumer side of the value delivery chain needed whole new processes and technology enablement, the supplier side wasn't fundamentally broken - even if it did need some attention. That attitude was reflected in what retailers perceived as the top-three business challenges their supply chains were dealing with at the end of 2019 (Figure 1).

Figure 1: The Pre-Pandemic Perspective

Top Three Business Challenges Around S/C Execution (2019-2020)

Challenge	Percentage
Consumer demand has grown more unpredictable	40%
Competitive pressures drive us to create shorter customer order-to-delivery cycles	36%
Growth: Making sure our supply chain can keep up with demand	35%
Digital channel growth outpaces store growth, putting new pressures on supply chain	31%

Source: RSR Research, March 2020

When the pandemic hit in March 2020 (ironically at the same time RSR published its 2021-22 benchmark report), the inflexibility of retailers' supply chains was exposed. While over the prior 30 years the supplier side had been hyper-optimized to reduce costs, it came at the expense of resiliency and agility. Faced with new risks revealed during the pandemic, both retailers and suppliers have struggled to adapt to fast changing conditions.

Agility, Resilience, And Sustainability

Today, retail supply chains are fragile, and *agility* (the ability to quickly adjust to changes in demand) and *resiliency* (the ability to respond to supply chain shocks) have become boardroom issues, even while challenges on the consumer side are still being addressed.

In our 2019-20 study, retailers identified "*real time visibility across the supply chain*" as a key driver of supply chain performance. But visibility into supply chains remains one of the biggest operational issues facing supply chain managers today. That gets in the way of addressing issues associated with improving supply chain agility and resilience, both for retailers and suppliers. **Dave Anderson, Managing General Partner at Supply Chain Ventures** (a venture capital company specializing in AI-enabled supply chain software & ecommerce logistics investing) recently put it this way:

> "*War, disease and politics will continue to drive reconfiguration, reshoring and automation in global supply chains… However, **end-to end visibility** remains an illusion for most supply chains—there are still plenty of dark holes in the data.*"

But new demands are also being put on the ecosystem that weren't top of mind in March 2020. *Sustainability* is rapidly becoming a consumer issue that affects retailers, manufacturers, and shippers. Sustainability is a broad subject that encompasses everything from ethical sourcing of raw materials and social responsibility regarding factory labor, to environmentally conscious manufacturing processes and reducing the carbon footprint associated with bringing products to market, and all the way to product end-of-life recycling. All of these considerations can impact supply chain planning and execution.

When It's Time For A Change

When we asked retailers to react to a series of statements about their supply chains, they clearly expressed concerns bordering on alarm that legacy supply chains cannot support the growth in their businesses. Even more, retailers are concerned about the disruptive nature of direct-to-consumer (D2C) shopping and fulfillment. Retailers suspect that all the variable costs associated with supporting new consumer shopping behaviors are undermining profitability, but raising retail prices to cover those variable costs is not a workable solution (Figure 2).

Figure 2: Is It Time For A Redesign?

Rate Your Reaction To The Following Statements

Legend: ■ Strongly Agree   ■ Somewhat Agree   ■ Somewhat Disagree   ■ Strongly Disagree

Statement	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
We are growing faster than our supply chain can sustain	49%	32%	15%	5%
A growing percentage of our business is direct-to-customer, bypassing traditional fulfillment	44%	46%	7%	2%
Staffing in our DC's and fulfillment centers is a big challenge	38%	43%	12%	7%
There are too many variables to understanding the true cost on a product-by-product basis	35%	30%	24%	10%
We cannot cover supply chain inefficiencies by raising prices	24%	40%	26%	10%

Source: RSR Research, April 2023

These concerns raise the question, *is now the time for business leaders to consider a fundamental redesign and retooling of supply chains*? Part of that challenge is that supply *chains* need to evolve into *networks*. As the saying goes, a chain is only as strong as its weakest link. But networks offer alternative paths to the desired outcome; when one link fails, another link in the network can be utilized. Agility and resiliency are more easily achieved with supply networks.

The purpose of this new benchmark was to better understand these challenges and opportunities and their impact on retailers' supply *networks*, as well as to learn how retailers are responding to the challenges and opportunities identified.

New Expectations On The Consumer Side

There is little doubt that new consumer expectations are triggering big changes in retailers' operational processes. Retailers' response to changing consumer expectations has created a ripple effect throughout operations and even with supplier relationships (Figure 3). The store is now highlighted as a customer order fulfillment location. And for those orders which cannot be fulfilled in the stores, DC's are being asked to handle customer order fulfillment. Almost one-half of the retailers in this study are even enabling vendor D2C order fulfillment, completely bypassing the traditional supply chain.

Figure 3: New Expectations

What Customer Order Fulfillment Strategies Are You Using Today?

■ All

Strategy	All
Buy online/pickup in store from store stock	78%
Buy online/ship to store for pickup	72%
Direct to consumer (D2C) fulfillment from store stock	70%
D2C fulfillment from distribution centers	59%
Buy online/pick up at curb or drive-through lane	58%
Vendor direct-to-consumer	45%
3rd party locations/services (dropoff and pickup points, lockers, etc)	41%
3rd Party delivery services (eg. Instacart)	29%
D2C from dark stores	23%

Source: RSR Research, April 2023

There is little evidence in RSR's research that consumers give retailers extra credit for offering these options – what might have been differentiating in 2019 are now baseline expectations. We know this because we asked; in 2022, RSR asked over 1000 U.S. based consumers about their tolerance for retailers' struggles to sell them what they want. As the following table shows, consumers are unforgiving:

	Strongly Agree	Agree	Disagree	Strongly Disagree
It is retailers' responsibility to deliver products to consumers no matter what	36%	40%	18%	6%
If prices are comparable, I am most likely to buy from whichever retailer can fill my order quickest	36%	46%	13%	5%

RSR Consumer Study, October 2022, N=1049

Over-performing retailers - those companies that RSR calls "Retail Winners" – are most keenly aware of consumers' attitudes.

Retail Winners And Why They Win

In our benchmark reports, RSR frequently cites the differences between over-performers in year-over-year comparable sales and their competitors. We find that consistent sales performance is an outcome of a differentiating set of thought processes, strategies and tactics. We call comparable sales over-performers "Retail Winners."

RSR's definition of these Winners is straightforward. Assuming industry average comparable store/channel sales growth of **7 percent in 2022**, we define those with sales above this hurdle as "*Winners*," those at this sales growth rate as "average," and those below this sales growth rate as "*laggards*" or "also-rans." We know that Retail Winners do have different thought processes from their under-performing peers.

Responses to our survey show that more Retail Winners than average and under-performers are both more aware of consumers expectations and also believe that consumers are more accommodating - at least to them (Figure 4). This may be more indicative of consumers' loyalty to Winners' brands than any other consideration. But what over-performers are equally sensitive to is that trying to cover higher costs associated with baseline customer order fulfillment expectations by raising retail prices is a non-starter.

Figure 4: Winners Seem To Have Better Relations With Consumers

Rate Your Reaction To The Following Statements ('Strongly Agree')

■ Winners ■ Others

Statement	Winners	Others
Consumers are willing to pay for additional order shipment options	53%	22%
It is retailers' responsibility to deliver products to consumers no matter what	53%	34%
Consumers are not willing to pay more despite the rising costs of goods and services	51%	34%
Consumers will accept substitute products when we are out of stock with their first choice	51%	28%
When returning purchases, consumers are willing to accept alternatives to cash refunds (eg. store credits)	45%	31%
Customers are willing to pay more for locally-sourced products	45%	38%
If we are out of stock due to supply chain interruptions, consumers are willing to wait until we are back in stock	37%	19%

Source: RSR Research, April 2023

When it comes to the supplier side of the supply chain, Winners both place a higher value on key capabilities and have gone farther to implement those capabilities, than average and under-performers have (Figure 5).

Figure 5: Winners Assign Greater Value To Key Capabilities

Value vs. Capability

- ■ Winners 'High Value'
- ■ Winners 'High Capability'
- ■ Others 'High Value'
- ■ Others 'High Capability'

Monitor capacity and add more when market conditions demand it
- 86%
- 76%
- 56%
- 53%

Model contingency plans for severe supply chain interruptions
- 69%
- 71%
- 53%
- 53%

Understand the impact of bottlenecks and prioritize which ones need to be addressed most
- 69%
- 69%
- 56%
- 41%

Simulate the effect of changes to the supply chain before implementation
- 65%
- 67%
- 44%
- 50%

Determine the optimal number of facilities and locations considering mid to long-term demand projections
- 63%
- 67%
- 47%
- 44%

Model the impact of business mergers on the supply chain
- 51%
- 59%
- 66%
- 38%

Source: RSR Research, April 2023

Differences like these between Winners and others will be highlighted throughout this benchmark report.

Methodology

RSR uses its own model, called The BOOT Methodology© to analyze Retail Industry issues. We build this model with our survey instruments. See Appendix A for a full explanation.

In our surveys, we continue to find the kinds of differences in thought processes, actions, and decisions cited above. The BOOT helps us better understand the behavioral and technological differences that drive sustainable sales improvements and successful execution of brand vision.

Survey Respondent Characteristics

RSR conducted an online survey in late 2022/early 2023 and received answers from 87 qualified retail respondents. Respondent demographics are as follows:

- **2022 Revenue (US$ Equivalent)**

Less than $50 million	2%
$51 million - $249 million	9%
$250 million - $499 million	34%
$500 million - $999 million	42%
$1Billion to $5 Billion	12%
Over $5 Billion	2%

- **Products sold:**

Fast Moving Consumer Goods (C-store, Food & Drug, Health Care Products)	31%
Apparel, Footwear, & Specialty	23%
Hard Goods (CE, Hard Goods, Home Décor, Improvement, Automotive)	9%
General Merchandise (Discount, Mass Merchant, Department Stores)	30%
Vertically Integrated Brand	7%

- **Retail Presence:**

USA	98%
Canada	32%
Latin America	20%
UK	19%
Europe	21%
Middle East & Africa	11%
Asia/Pacific	15%

- **Year-Over-Year Sales Growth Rates** (assume average growth of **7%**):

Worse than average	7%
Average	32%
Better than average ("Retail Winners")	60%

- **Respondents Position Within The Organization**

Executive (C-level)	51%
Senior Management (SVP)	22%
Middle Management (VP / Director)	25%
Line Manager	1%
Individual Contributor and Other	1%

- **Functional Area of Responsibility**

Executive Management	28%
Finance, Legal, Human Resources	5%
Information Technology (IT), Data Science & Analytics	40%
Marketing	3%
Merchandising & Product Development	6%
Supply Chain, Store Operations, & Ecomm/Direct Operations	19%

Business Challenges

A Multitude Of Challenges Collide To Create One Perfect Enemy

With such a litany of pressures from the outside pressing in on retailers' four walls, we offered our respondents a long list of external challenges and asked them to the top three driving them towards the need to change.

As figure 6 shows, we didn't need to offer such a lengthy menu of choices. More than half of retailers immediately point to how slow and inflexible existing supply chains have become. This was a problem prior to the COVID-19 outbreak: it has since become both a crisis and *a strong motivator to act*.

Figure 6: The Sum Of Many Parts

What Are The Top Three Business Challenges Causing Your Company To Address Supply Chain Agility?

■ All

Challenge	All
Global supply chains are too slow and inflexible	54%
Baseline operating costs of near-sourcing force us to source products from overseas	32%
Time to volume of new products is too slow	30%
Digital channel growth outpaces store growth, putting new pressures on supply chain	28%
Geopolitical and environmental issues create uncertainty	27%
Challenges with suppliers around drop-ship and other direct-to-consumer strategies	23%
Our suppliers don't have knowledge of the markets we serve	22%
Competitive pressures drive us to create shorter customer order-to-delivery cycles	20%
Consumer pressures for faster fulfillment	17%
Consumer demand has grown more unpredictable	16%
Climate issues	11%
Concerns about ethical sourcing and operations are on the rise	11%
Changing in regulations and compliance	7%

Source: RSR Research, April 2023

Everything, Everywhere, All At Once

This is not to say retailers aren't plagued by other external issues: the growing unpredictability of customer demand is part and parcel to why retailers can no longer abide such slowness and inflexibility: as are many of the lesser-selected choices within Figure 4, above. For example, suppliers' lack of understanding of the market retailers are required to serve, climate issues, and uncertainty stemming from geopolitical issues ALL have effect (22%, 11%, and 27% of retailers identify each option, respectively, as a top-three issue). But **what these ensuing data points truly expose is a supply chain network that is too staid and brittle to adapt to any one of them, let alone all of them all at once**.

Such is the picture of what is happening well outside the bounds of what a retailer - for all but the largest and most powerful brands in the business – has the ability to control. But what about the things they can control? The Operational Challenges that exist within their day-to-day operations? As Figure 7 reveals, the answer depends heavily on a retailer's performance.

Figure 7: The Times, They Are A-Changin

Top Three Operational Challenges To Increased Supply Chain Agility

■ Winners   ■ Others

Challenge	Winners	Others
Fulfilling growing online demand	41%	38%
Rapid changes in consumer demand undercut our ability to buy big and lower costs	47%	25%
Short-term supply chain volatility is preventing us from planning long-term strategies	35%	41%
Keeping forecasts in sync with changing demand	39%	25%
Insufficient inventory visibility	31%	34%
Securing availability of supply	33%	28%
Managing moving supply chain capacity bottlenecks	27%	28%
The variable costs in the supply chain are hard to manage	12%	31%
Omnichannel fulfillment has undermined profitability	16%	22%
Insufficient days of supply within the supply chain	12%	9%
Lack of contingency planning	4%	13%
Over-reliance on foreign sources	4%	6%

Source: RSR Research, April 2023

9

The best performing retailers, those whose sales are already outperforming the norm, say they no longer have the ability to buy in the larger quantities that enable them to enjoy lower costs. While this may seem like an internal choice to create a more diverse product mix, Winners argue that it is the direct result of a changing set of customer demands. They simply don't have the confidence to buy products in as large of quantities as they did even just a few short years ago, and therefore, are hedging their bets. It's a strong indicator of why they also ascribe such an el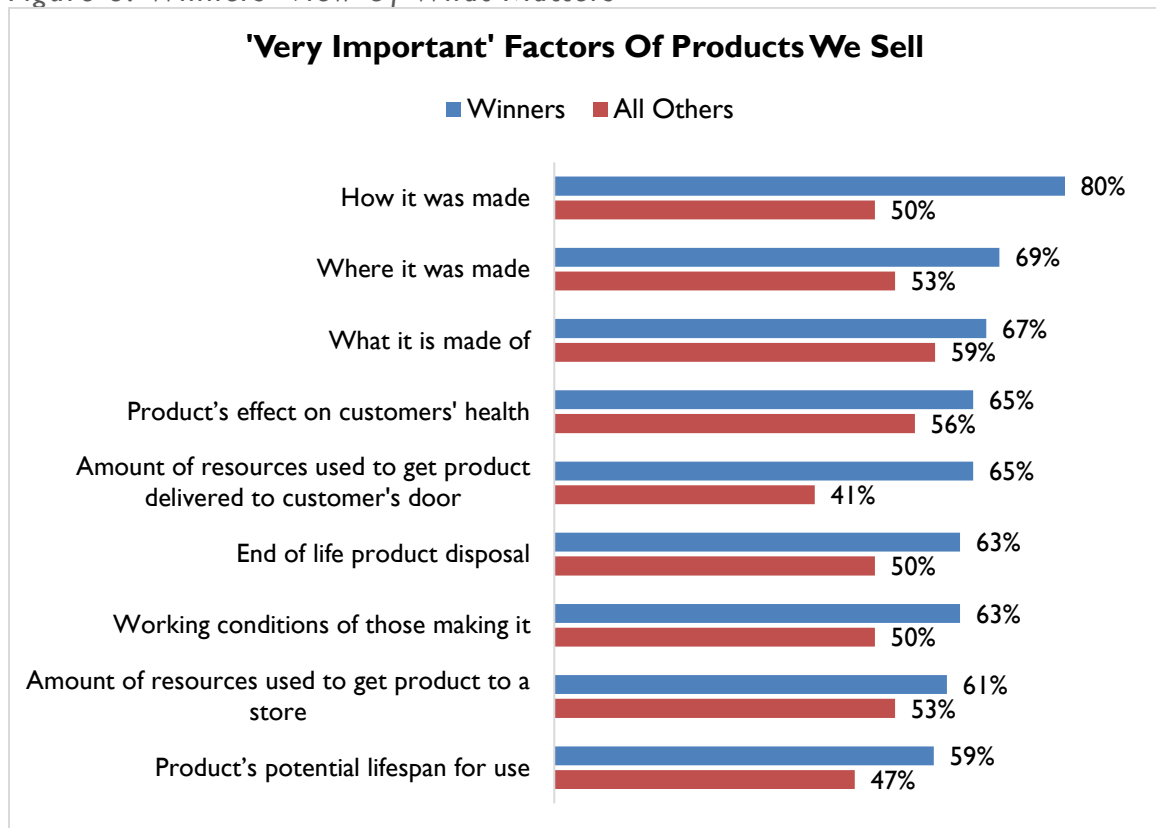evated value to forecasting tools that will help keep them in syn with demand – as it changes. These tools present the opportunity to create more confidence in "what's coming next", and therefore plan – and buy – with a higher degree of certainty.

The Green Sidebar

At RSR, we've been examining the environmental component of virtually every aspect of the retail enterprise since we opened our doors in 2007. In early days, most retailers only considered the issue as it pertained to lowering their own HVAC and power use costs. Today, **the supply chain is a prime candidate** for ways many look to not only lower costs, but also to tell a better story to consumers.

If one needed further evidence that a) Winners think differently than their peers or that b) Environmental Sustainability is a Winning issue to be striving towards in our industry, Figure 8 should do well to settle both matters.

Figure 8: Winners' View Of What Matters

'Very Important' Factors Of Products We Sell

■ Winners   ■ All Others

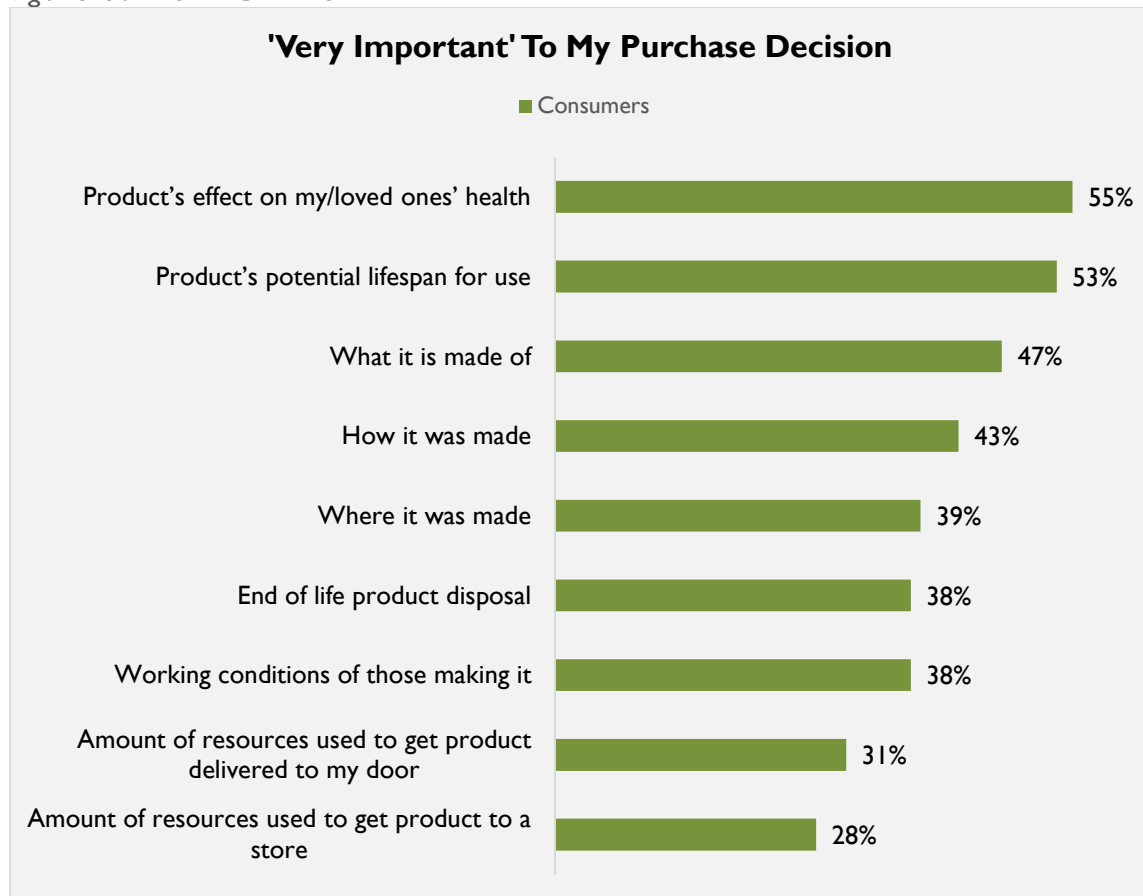| Factor	Winners	All Others
How it was made	80%	50%
Where it was made	69%	53%
What it is made of	67%	59%
Product's effect on customers' health	65%	56%
Amount of resources used to get product delivered to customer's door	65%	41%
End of life product disposal	63%	50%
Working conditions of those making it	63%	50%
Amount of resources used to get product to a store	61%	53%
Product's potential lifespan for use	59%	47%

Source: RSR Research, April 2023

Those with better sales figures are more interested in every ecologically-minded product concept we put forth – across the board. From where a product was made to how it was made, to what it is

made of to how it is discarded once its usefulness has played out – Winners think each of these product attributes matters to shoppers. The question is, are they right? The answer is both yes and no.

All Those Delivery Trucks

What is perhaps most interesting, however, is that Winners - and truly all retailers - miss the mark by a wide margin about what shoppers care about when it comes to sustainability and more importantly – about **why** it is that customers do, indeed, care when they do. When we asked one thousand US-based shoppers aged 18 and up what they thought of these features, it turns out the number one answer does not make retailers' perceived top-3. For consumers, this is all about how a product directly affects the end user's well-being (Figure 9).

Figure 9: Me And Mine

'Very Important' To My Purchase Decision

■ Consumers

Product's effect on my/loved ones' health	55%
Product's potential lifespan for use	53%
What it is made of	47%
How it was made	43%
Where it was made	39%
End of life product disposal	38%
Working conditions of those making it	38%
Amount of resources used to get product delivered to my door	31%
Amount of resources used to get product to a store	28%

Source: RSR Research, January 2023

Consumers do give some mindshare to the working conditions of the often-times impoverished people who make the goods they consume (38%), how those products might have been made (43%), and in many cases, the materials (or as we'll see in a moment, *ingredients*) that went into the final product (47%). But while helping to shore up a stereotype that most people really only care about themselves, our shoppers let us know that – to date – ***their ecologically-conscious stream of thought isn't based in concerns about long-term harm to the planet or harm to others***: it is primarily based on the immediate, identifiable impact upon them and the people they love. The fact that they give little consideration to the amount of resources required to deliver a product to either the store or their door show further proves that for them, products just magically appear on

the shelf or at the doorstep, and helps to explain the multitude of delivery trucks roaming the streets outside while conducting (or reading) this research.

Is There Any Good News For The Supply Chain?

The good news that can be gleaned from all of this self-preservation-based shopping behavior: consumers are willing to open their wallets for products that *they believe* will help them and their families live longer, healthier lives.

Figure 10: Willing To Pay

How Likely Are You To Pay More For A More Sustainable Product Option Based On The Following?

■ Very Likely ■ Somewhat Likely ■ Not Likely

	Very Likely	Somewhat Likely	Not Likely
Product's effect on my/loved ones' health	46%	37%	16%
Product's potential lifespan for use	44%	40%	17%
What it is made of	35%	44%	21%
How it was made	32%	43%	25%
End of life product disposal	32%	43%	26%
Where it was made	31%	42%	28%
Working conditions of those making it	30%	42%	28%
Amount of resources used to get product delivered to my door	25%	44%	31%
Amount of resources used to get product to a store	25%	42%	33%

Source: RSR Research, January 2023

What is so interesting about the data from Figure 10 is that an increasing number of both manufacturers and retailers are aware of the trend – if still a bit rough around the edges about which products, and which attributes of those products matter most.

This is directly evidenced by the growing number of what RSR calls "bifurcated stores." Pharmacies, grocery stores, and even fashion-based retail locations increasingly feature entirely distinct sections for health-minded or eco-friendlier options. Once relegated to tiny sections in hard-to-find sections of stores, these spaces for alternative products are becoming far larger, and *far more prominently located* in everything from mall-based shoe stores to airport newsstands, and in many major pharmacy chains, the "healthy options" section is now equal in size (and preferential in placement) to both snack and candy sections. Many of these products have been greenwashed – or promoted and packaged to simply appear better for the consumer – leaving shoppers to fend

for themselves in their education of what's genuinely "better" and what is just marketing hype. If the messaging successfully runs their individual gauntlet, however, an increasing number of consumers are now willing to pay more.

Which Categories?

A moment ago shoppers told us their third highest reason to consider more sustainably-minded products was for "what it is made of." As it turns out, that is far less likely to mean the plastic or dye that goes into their sneakers and far more likely to mean the chemicals used (or not used) in the production of their spinach or their eyeshadow.

Figure 11: It Matters When It Matters

How Often Does The Ethical/Sustainable Footpring Of A Product Affect Your Purchase Decision?

■ Always ■ Most Of The Time ■ Sometimes ■ Never

Category	Always	Most Of The Time	Sometimes	Never
Fresh produce	32%	28%	25%	16%
Packaged groceries (boxed pasta, cereal, etc)	24%	32%	27%	18%
Health and beauty items	23%	32%	27%	18%
Automobiles	22%	21%	29%	27%
Household items (household cleaners, lightbulbs)	20%	31%	31%	18%
Baby products	20%	23%	21%	36%
Shoes and sneakers	19%	31%	30%	20%
Routine clothing purchases (t-shirts, socks)	19%	27%	33%	21%
Major appliances (dishwasher, refrigerator, etc)	19%	25%	29%	27%
Kitchen and cooking accessories (pots and…)	18%	29%	32%	21%
Electronics	18%	26%	33%	23%
Jewelry and accessories	16%	24%	31%	29%
Furniture	16%	26%	32%	25%
Fashion/special occasion clothing purchases	16%	27%	33%	24%
Toys	15%	22%	31%	31%
Hardware/tools	15%	26%	31%	29%
Sporting goods	12%	22%	31%	35%

Source: RSR Research, January 2023

As we noted in our most recent merchandising survey, *Merchandising In The Modern Era: More Important Than Ever*:

When returning to retailers' awareness and understanding of these issues, Winners display a commanding lead in their comprehension of exactly these trends (Figure 12).

Figure 12: Winners Get It

How Much Does The Ethical/Sustainable Footpring Of A Product Influence Consumers Shopping Choices
(% answering 'A Great Deal')

■ Winners ■ Others

Category	Winners	Others
Fresh produce	69%	44%
Health and beauty items	63%	53%
Routine clothing purchases (t-shirts, socks)	63%	53%
Packaged groceries (boxed pasta, cereal, etc)	61%	47%
Baby products	61%	53%
Jewelry and accessories	51%	25%
Furniture	51%	38%
Kitchen and cooking accessories (pots and pans, dining ware)	49%	31%
Household items (household cleaners, lightbulbs)	49%	28%
Shoes and sneakers	49%	38%
Fashion/special occasion clothing purchases	49%	34%
Electronics	47%	34%
Major appliances (dishwasher, refrigerator, etc)	45%	34%
Toys	43%	31%
Hardware/tools	41%	31%
Sporting goods	39%	38%

Source: RSR Research, April 2023

The best retailers know they need not be prioritizing the promotion of baseball gloves that come from near-distance farms with ethically-treated animals, nor the reduced packaging that surrounds

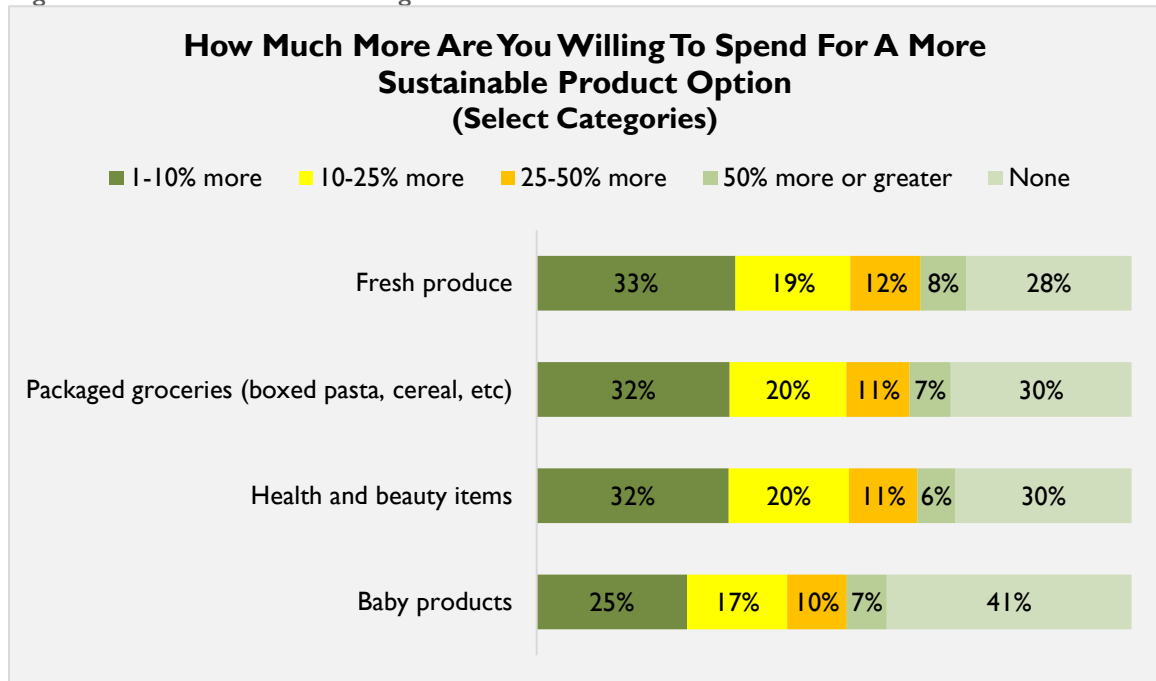the newest Bluetooth speaker that's just launched. They are quite wise, however, to work quickly to promote the ethical sourcing or reduced industrial content used to provide perishable, health and beauty, or baby-related merchandise.

Quantifying The Opportunity

How much is all of this information about a product's background and footprint worth at the cash register? The numbers highlighted in yellow and orange in Figure 13 help to tell the tale.

Figure 13: A True Sales Angle

How Much More Are You Willing To Spend For A More Sustainable Product Option
(Select Categories)

■ 1-10% more   ■ 10-25% more   ■ 25-50% more   ■ 50% more or greater   ■ None

Category	1-10% more	10-25% more	25-50% more	50% more or greater	None
Fresh produce	33%	19%	12%	8%	28%
Packaged groceries (boxed pasta, cereal, etc)	32%	20%	11%	7%	30%
Health and beauty items	32%	20%	11%	6%	30%
Baby products	25%	17%	10%	7%	41%

Source: RSR Research, January 2023

Supply chains may be old, inflexible, and the executive leadership required to bring about effective change may be in short supply. But from everything we've seen and know about the changing needs and increasingly impatient nature of today's shopper, *a retailer's ability to tell a legitimately greener story about the products it delivers to consumers may help provide some of the funding required to bring about real and meaningful change*.

Let's now examine some of the other opportunities that retailers self-identify.

Opportunities

Chains vs. Networks

In the **Research Overview** section of this report, we used the term "supply *network*" to describe the future-state of supply chains. What's the difference? Both strategies are intended to align supply and demand, but chains are linear whereas networks are a grid of interconnected components, chains are closed while networks are open, chains are rigid while networks are adaptive.

Figure 2 points out that retailers are concerned that their supply chains cannot keep up with their businesses. Some strategists suggest that the future of the supply chain "isn't a chain at all"[1], but a supply network. But that objective implies a redesign of the supplier side of the retail business – but that is a big, complex, and (probably) expensive undertaking.
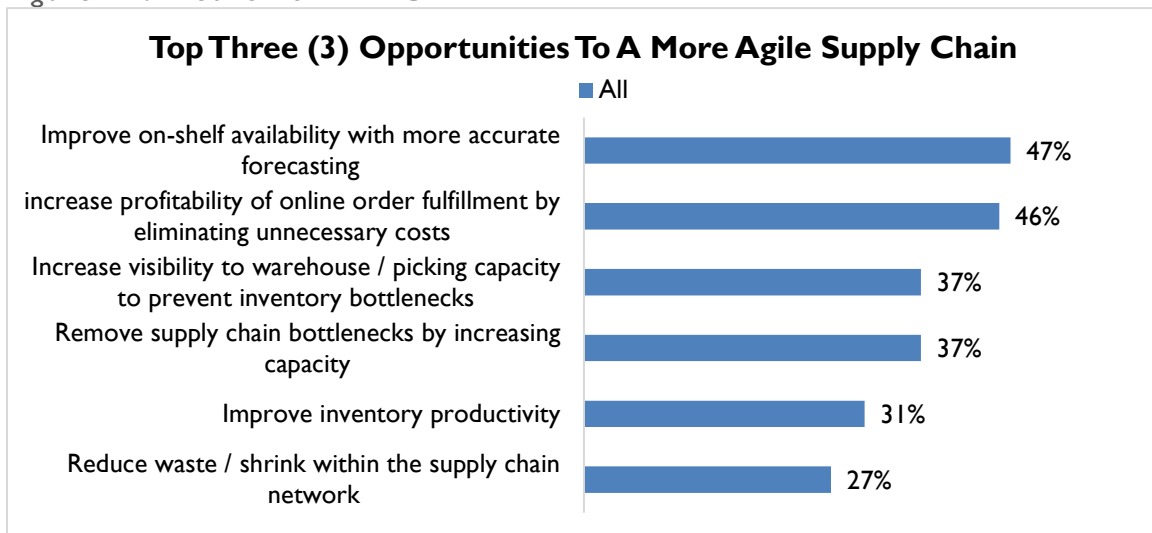
The findings in this study suggest that retailers are taking a stepwise approach towards modernizing the supply side of their businesses. For now, retailers are focused on improvements that can be made to existing supply *chains*. However, RSR believes those chains will need to be re-imagined as *networks* to be sufficiently agile and resilient to meet the needs of the business.

Aligning With Consumers

In the wake of all the product availability issues that have plagued retailers, "the supply chain" has become a breakfast table conversation for consumers. But with just a few notable exceptions (large and successful retailers like Walmart, Home Depot, Tesco PLC), retailers don't have much control over the incoming flow of raw materials to points of manufacturing, labor shortages in factories, and hang-ups at ports of entry.

Instead, the top opportunities that retailers prioritize are in those factors that they feel they *can* influence (Figure 14).

Figure 14: Means To An End

Top Three (3) Opportunities To A More Agile Supply Chain

■ All

Improve on-shelf availability with more accurate forecasting	47%
increase profitability of online order fulfillment by eliminating unnecessary costs	46%
Increase visibility to warehouse / picking capacity to prevent inventory bottlenecks	37%
Remove supply chain bottlenecks by increasing capacity	37%
Improve inventory productivity	31%
Reduce waste / shrink within the supply chain network	27%

Source: RSR Research, April 2023

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[1] https://resources.coyote.com/source/supply-chain-vs-networks

"*Improved forecasting*" has been on retailers' wish lists for a long time. Just as RSR has been observing for over 10 years, "*More accurate forecasting*" is at the top of the list of opportunities that retailers identify (Figure 15).

Figure 15: Demand – A Fast Moving Target

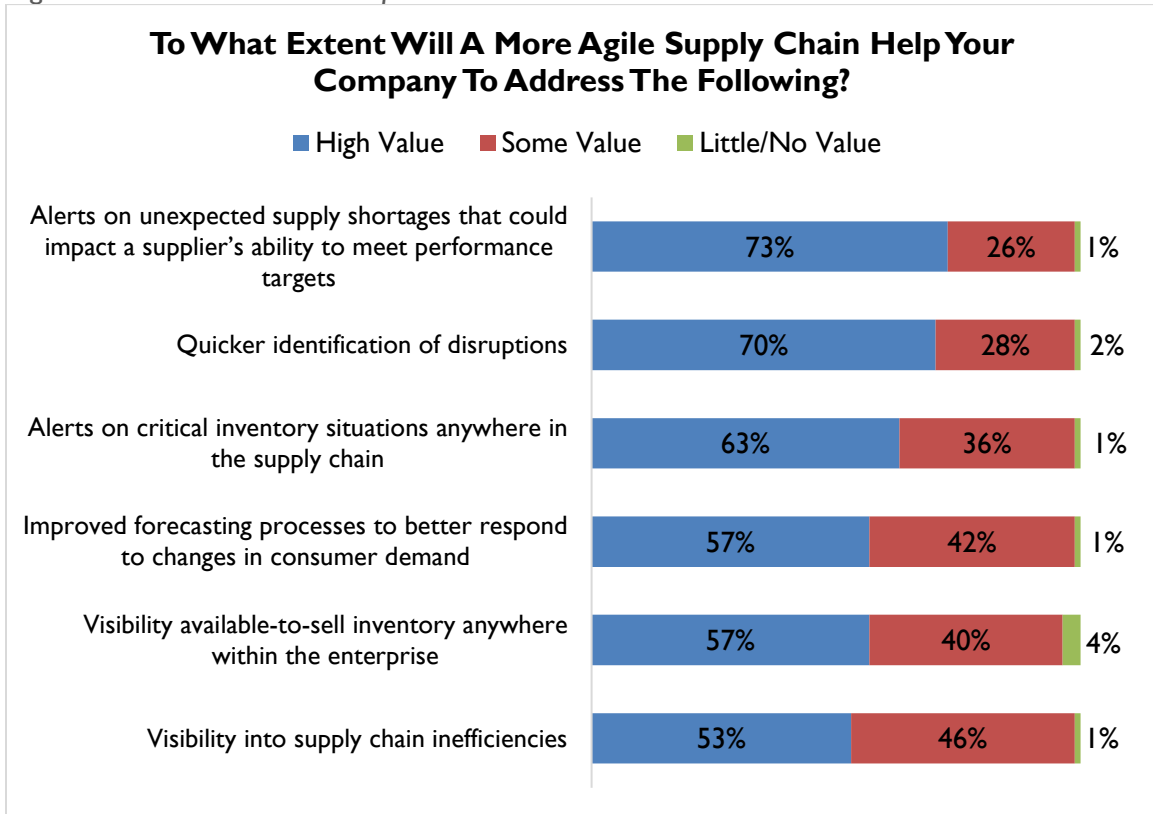| Top Opportunities To Improve Supply Chain Performance					
	2012	**2015**	**2018**	**2020**	**2023**
Improved Forecasting	51%	41%	36%	54%	47%

Source: RSR Research, April 2023

These findings might lead a casual observer to think that little progress is being made to improve planning and forecasting- but that interpretation would be a mistake. Improvements in forecasting analytics and the new data available to retailers have had a profound impact on the precision with which planners can forecast consumer demand. As RSR noted in our 2021 benchmark entitled **Managing Through Disruptive Times With Data Driven Speed And Adaptability**[2], over-performing Retail Winners put an "*emphasis on the ability to produce highly granular and accurate forecasts using new data and gain new insights from existing data*" (we'll see more about "improved forecasting" later in this report).

What *has* changed are the dynamics of the marketplace itself. Fast and fierce competition, consumers' ability to shop anywhere 24X7 via digital devices, and a generational shift in today's shoppers, are contributing factors forcing retailers to be much more agile in response to changes in both supply and demand than they ever had to be before.

Those dynamics are reflected in the value that retailers place on *better visibility* and *improved exception alerts,* in addition to *better forecasting* (Figure 16).

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[2] **Managing Through Disruptive Times With Data Driven Speed And Adaptability,** RSR Benchmark Report, February 2021

To What Extent Will A More Agile Supply Chain Help Your Company To Address The Following?

■ High Value ■ Some Value ■ Little/No Value

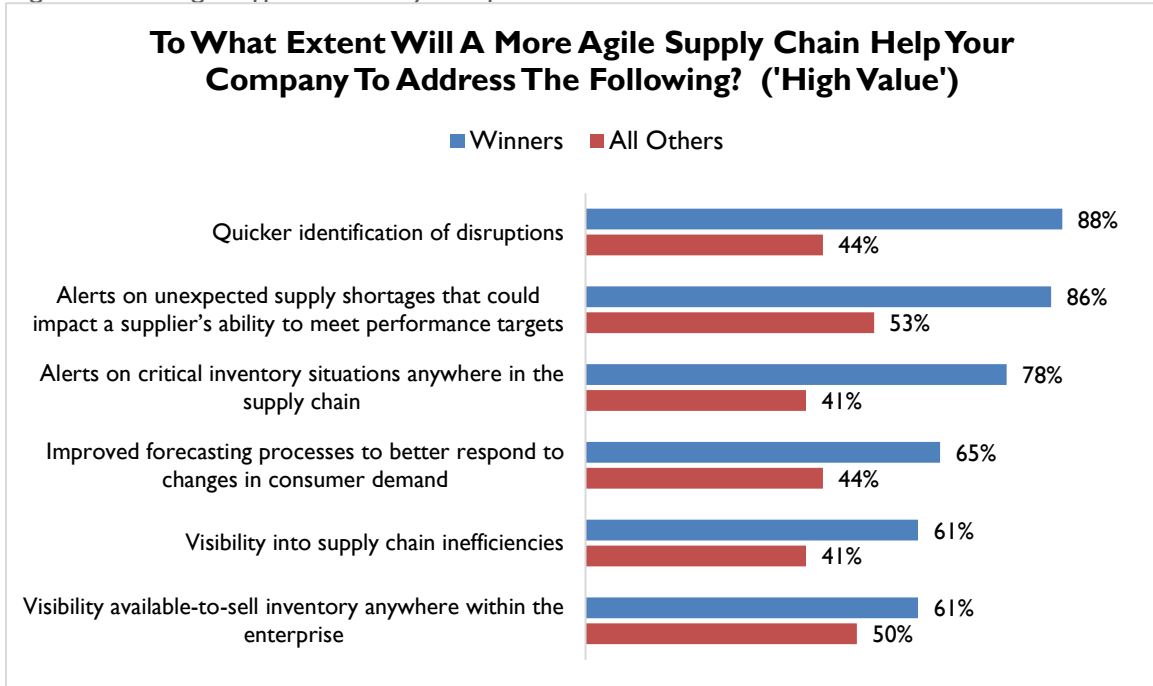| Capability	High Value	Some Value	Little/No Value
Alerts on unexpected supply shortages that could impact a supplier's ability to meet performance targets	73%	26%	1%
Quicker identification of disruptions	70%	28%	2%
Alerts on critical inventory situations anywhere in the supply chain	63%	36%	1%
Improved forecasting processes to better respond to changes in consumer demand	57%	42%	1%
Visibility available-to-sell inventory anywhere within the enterprise	57%	40%	4%
Visibility into supply chain inefficiencies	53%	46%	1%

Source: RSR Research, April 2023

While there isn't a single capability that we inquired about that nearly every retailer didn't assign at least some value to, the aggregate responses hide what competitive weapons these capabilities can be. For every capability we highlighted, it is Retail Winners that assign the greatest value (Figure 17).

Figure 17: Big Differences By Performance

To What Extent Will A More Agile Supply Chain Help Your Company To Address The Following? ('High Value')

■ Winners ■ All Others

Category	Winners	All Others
Quicker identification of disruptions	88%	44%
Alerts on unexpected supply shortages that could impact a supplier's ability to meet performance targets	86%	53%
Alerts on critical inventory situations anywhere in the supply chain	78%	41%
Improved forecasting processes to better respond to changes in consumer demand	65%	44%
Visibility into supply chain inefficiencies	61%	41%
Visibility available-to-sell inventory anywhere within the enterprise	61%	50%

Source: RSR Research, April 2023

There is only one capability that Winners and others are in near agreement about, and that is "*visibility available-to-sell inventory anywhere within the enterprise*". But that is driven by consumer expectations for a seamless shopping experience more than by retailers trying to be more proactive. In October 2022, when we asked consumers how forgiving they are when they can't find what they are looking for, we learned that there isn't much wiggle room for retailers (Figure 18).

Figure 18: Consumer Want What They Want When They Want It

'Strongly Agree'

Statement	Value
If prices are comparable, I am most likely to buy from whichever retailer can fill my order quickest	36%
It is retailers' responsibility to deliver products to consumers no matter what	36%
Interruptions to the supply of goods are completely understandable amidst global turmoil (COVID-19, weather events, etc)	34%
I am willing to pay more for more locally-sourced/manufactured items	26%
If my favorite retailer is out of stock, I will wait for them to be back in stock	22%

Source: RSR Research, October 2022, N=1039

19

Reducing Carbon Emissions Is Good PR And Good Business

In the **Research Overview** section of this report, we pointed out that "*sustainability is a broad subject that <includes> reducing the carbon footprint associated with bringing products to market, and all the way to product end-of-life recycling.*"

RSR noted in our recent Merchandise Planning study[3] that "sustainability" is quickly becoming a competitive wedge issue separating over-performers and other retailers – with the caveat that it is driven more by changing consumer expectations than operating costs (Figure 19).

Figure 19: Environmental Issues Start To Emerge

'Strongly Agree'	Winners	Others
We offer sustainably sourced products because customers are demanding them	61%	17%
We offer sustainably sourced products because it is a differentiator for our brand	52%	3%
Sustainability is more about lowering our operating costs than anything else	36%	3%

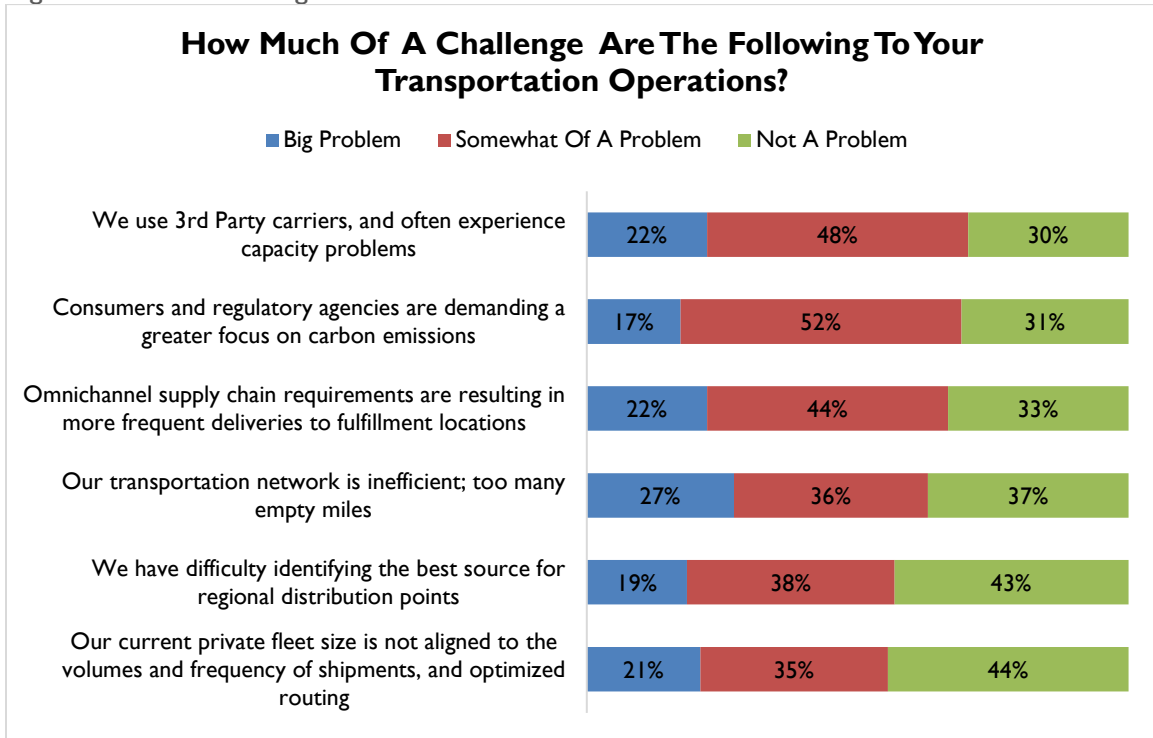*Source: RSR Research, January 2023*

In this study, we are able to highlight a growing concern about carbon emissions when it comes to transportation.

In our 2021 benchmark on the state of the retail supply chain[4], we noted that "*Winners are much more bullish on "consolidating trucking and transportation routes in a manner that reduces carbon emissions" (59% vs. 37% for non-winners)".* In this study, we can see that although retailers collectively are moderating their opinions about challenges in their transportation networks (as evidenced by the preponderance of those who rate the challenges as "somewhat of a problem"), a top-two concern is that "*Consumers and regulatory agencies are demanding a greater focus on carbon emissions*" (Figure 20).

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[3] **Merchandising In The Modern Era: More Important Than Ever,** RSR Benchmark report, January 2023

[4] **Retail Supply Chain: Navigating Through Rough Waters With Improved Agility,** RSR Benchmark report, November 2021
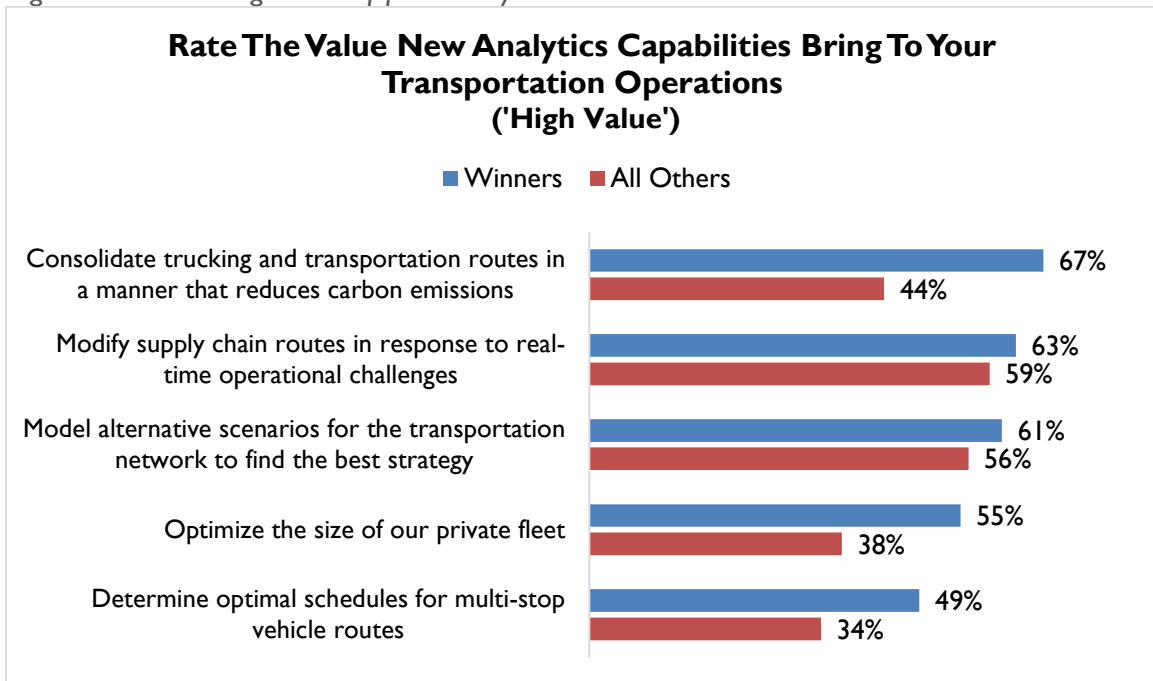
How Much Of A Challenge Are The Following To Your Transportation Operations?

■Big Problem　■Somewhat Of A Problem　■Not A Problem

	Big Problem	Somewhat Of A Problem	Not A Problem
We use 3rd Party carriers, and often experience capacity problems	22%	48%	30%
Consumers and regulatory agencies are demanding a greater focus on carbon emissions	17%	52%	31%
Omnichannel supply chain requirements are resulting in more frequent deliveries to fulfillment locations	22%	44%	33%
Our transportation network is inefficient; too many empty miles	27%	36%	37%
We have difficulty identifying the best source for regional distribution points	19%	38%	43%
Our current private fleet size is not aligned to the volumes and frequency of shipments, and optimized routing	21%	35%	44%

Source: RSR Research, April 2023

Just as we saw in the Merchandising study example, Winners are seizing on the growing concern of "carbon emissions" to both differentiate in the eyes of consumers <u>and</u> to save money (Figure 21).

Rate The Value New Analytics Capabilities Bring To Your Transportation Operations
('High Value')

■Winners　■All Others

	Winners	All Others
Consolidate trucking and transportation routes in a manner that reduces carbon emissions	67%	44%
Modify supply chain routes in response to real-time operational challenges	63%	59%
Model alternative scenarios for the transportation network to find the best strategy	61%	56%
Optimize the size of our private fleet	55%	38%
Determine optimal schedules for multi-stop vehicle routes	49%	34%

Source: RSR Research, April 2023

This is a smart move on the part of over-performers. Consumers are expressing a growing awareness of the challenge, and Winners are claiming the high ground – while at the same time optimizing their transportation fleets and networks.

Summing Up The Opportunities: Tactics vs. Strategy

As we stated at the start of this report, *agility* and *resiliency* have become boardroom issues. Ultimately however, the push for greater flexibility is being driven by ever-rising consumer expectations. With *sustainability* also rapidly becoming a consumer issue, Retail Winners very clearly see the need to make **tactical** improvements to the supply side of their businesses.

Average and under-performing retailers would be well served by following the leaders. Consumers *are* paying attention.
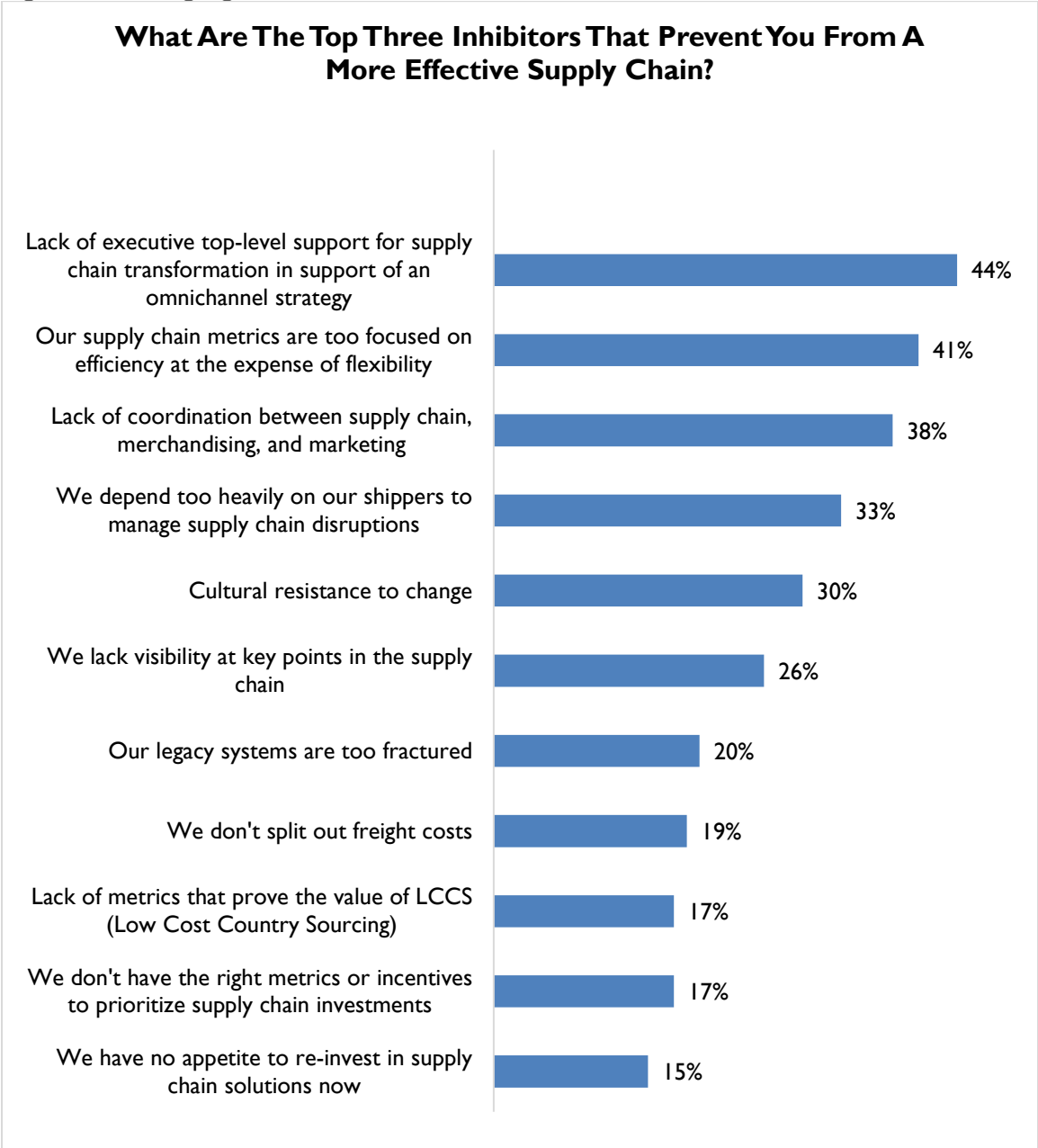
But retailers across the spectrum aren't addressing the bigger **strategic** issue, that their supply chains – even with all the improvements that retailers are envisioning – will not be sufficiently agile or resilient to sustain the business going forward. Retailers need to start thinking about strategies that can help them to mitigate the effects that climate change and the environment, raw materials scarcity, geopolitics and war, tariffs and regulation, the availability of labor, technology, and consumer expectations, have on where and how they will source products in the future.

Organizational Inhibitors

A Top-Down Problem Emerges

Typically, when asked to identify the roadblocks in their way, retailers' responses vary wildly based on where they are located, what types of products they sell, or how well their bottom line is performing. As it relates so supply chain inhibitors, however, some rare ubiquity emerges (Figure 22).

Figure 22: Singing In Unison

What Are The Top Three Inhibitors That Prevent You From A More Effective Supply Chain?

Inhibitor	Percentage
Lack of executive top-level support for supply chain transformation in support of an omnichannel strategy	44%
Our supply chain metrics are too focused on efficiency at the expense of flexibility	41%
Lack of coordination between supply chain, merchandising, and marketing	38%
We depend too heavily on our shippers to manage supply chain disruptions	33%
Cultural resistance to change	30%
We lack visibility at key points in the supply chain	26%
Our legacy systems are too fractured	20%
We don't split out freight costs	19%
Lack of metrics that prove the value of LCCS (Low Cost Country Sourcing)	17%
We don't have the right metrics or incentives to prioritize supply chain investments	17%
We have no appetite to re-invest in supply chain solutions now	15%

Source: RSR Research, April 2023

Despite being presented with nearly a dozen options from which to choose, nearly half of the retailers in our study select a serious lack of top-level support as a top-tier challenge. How can this be? As we've already seen multiple times in this research, the need for increased agility is a palpable concern among our retail respondents in the face of rapidly-shifting consumer demand. Worse yet, we've also seen that when consumers don't find what they are looking for, they are more than willing to shift their loyalty to wherever – and whomever – can. With such widespread knowledge of both the need to change and the urgency to change, how could executives still not be on board?

The answer is actually quite simple: 41% of retailers say the metrics they use to gauge success are old and irrelevant. These KPIs are based in a time when efficiency was what mattered most– not the flexibility that is so desperately needed today. As a result, **many executives likely have a poor understanding of how their supply chains are performing**, as metrics based in "efficiency ratings" may be telling them everything is just fine.

This isn't about cultural resistance to change, which has typically been a top inhibitor. This is actually far more insidious than that: *retail executives need better information to assess their own supply chain performance.* As it stands, far too many top retail minds read headlines about supply chain troubles and think, "That must be tough. Glad we're in better shape than that." All at great peril to their customers – and ultimately - their brand.

How Now?

Based on everything we've just seen, Winners' belief that improved analytics are the #1 way out of this mess shows enhanced recognition - not only of how we got here - but where we, as an industry, must go. Their appetite for better tools to truly measure whether a supply chain is operating the way they need it to (not just efficiently) – outstrips that of average and underperforming retailers by a nearly 2 to 1 ratio (Figure 23)

Top Three Ways To Overcome Organizational Inhibitors

■ Winners ■ All Others

	Winners	All Others
Business analytics capabilities that help us measure the effect of supply chain activity	53%	34%
Eliminating multiple channel-specific platforms around customer order and fulfillment	43%	28%
More top-level involvement in supply chain strategy	39%	25%
Better visibility will help us identify bottlenecks and break points	35%	47%
Re-aligning the company's organizational structure to be less channel-specific	35%	41%
A well-defined business case and ROI calculation	33%	47%
Better metrics to understand supply chain costs and opportunity costs	27%	31%
Re-aligning incentives to recognize cross-channel activity	22%	22%
Analytics capabilities that help us respond more quickly to real-time conditions	14%	25%

Source: RSR Research, April 2023

In each of the top three data points in Figure 23, Winners demonstrate a profound understanding of the "big picture": firstly, yesterday's metrics don't work for today, and analytics that enable them to measure supply chain activity by modern standards are paramount.

But just as importantly, the 15 point gap between them and all others at it relates to eliminating multiple channel specific platforms around customer order and fulfillment show is a very big deal. Customers don't research products in "channels," and they certainly don't order them in channels, either. Retailers can no longer think in this way because shoppers have long abandoned the notion. Put simply, supply chains (and thinking that surrounds them) cannot be representative of a time gone by.

The third data point in Figure 23 also harkens back directly to what we've just seen in Figure 22: that executives need to be more involved in supply chain strategy. Winners get this more – by a margin of 14 percentage points. Their top tree ways to overcome the organizational inhibitors that stand in their way are all long-term, game changing and stategical concepts.

By way of comparison, average and underperformers prioritize the immediate problems at hand: identifying bottlenecks and breakpoints, and perhaps an ROI calculator to prove there is value in doing more work here.

Put simply, average and underperformers are working to mop up the puddles that result from a leaky roof. Winners are working on fixing the hole in the roof. Now let's find out the technologies they plan to use to help them do so.

Technology Enablers

Better Forecasting Before All Else

The supply chain has, since the industry-wide implementation of point-of-sale scanning in the 1980's and '90's, benefited from the power of data analytics. Using *sales trend and ranking analyses*, retailers have been able to optimize assortments, buy in the best economic quantities, and translate the resulting cost-of-goods improvements on to consumers in the form of low prices. To compete with giants like Walmart that perfected the mass merchandising model, virtually every retailer over $50M in annual revenue had to learn to use the power of this kind of analytics to win and keep customers.
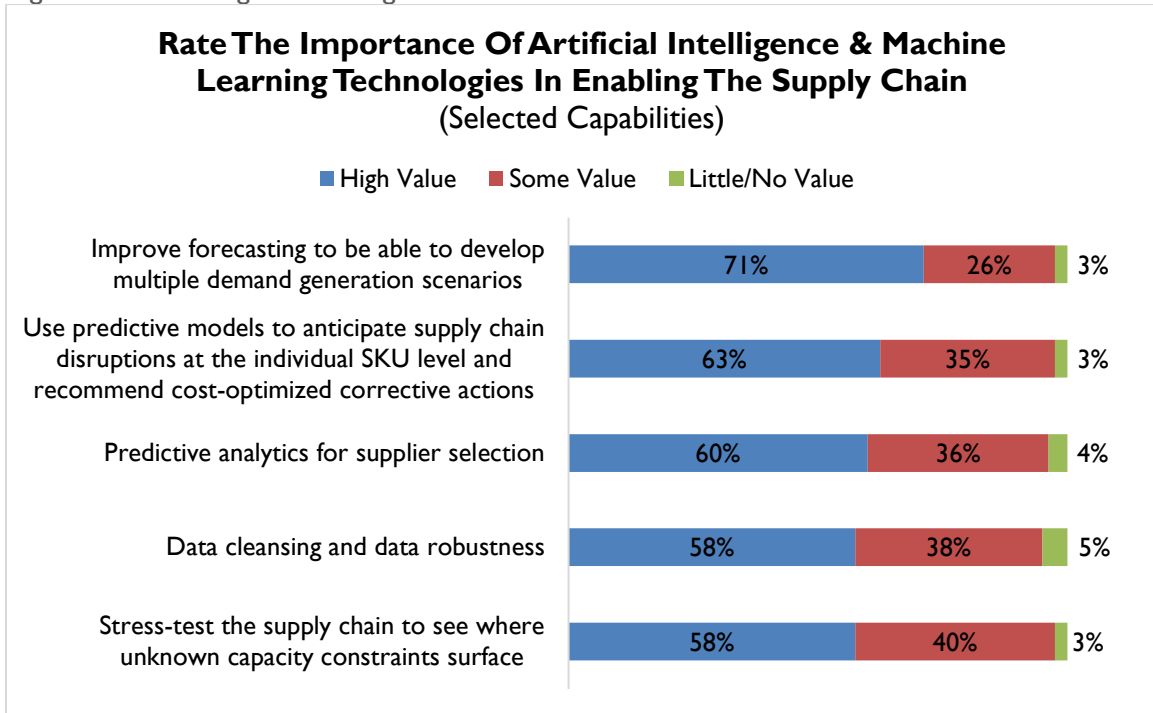
But the mass merchandising model has been subverted by consumers and their 24X7 digitally enabled shopping behaviors – driving retailers to seek greater *agility* in their supply chain, merchandising, and sales operations, to respond to shifts in demand.

Retailers are learning that a key to responding quickly to changing conditions is to *anticipate* them, and that is driving consideration of new predictive analytical capabilities enabled by Artificial Intelligence and Machine Learning technologies. It was only three years ago that retailers expressed more caution about the promise of AI and ML. In RSR's 2020 benchmark on the state of AI adoption, 60% of over-performing retailers and a mere 27% of average and under-performers strongly agreed with the statement, "*AI-enabled analytics will have a profound effect on supply chain planning in the next three years*"[5].

Now in 2023, Retailers' responses indicate far more enthusiasm about the power of new analytics to help them to use predictive modeling techniques to optimize their ability to respond quickly to a fast-changing marketplace (Figure 24).

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[5] **Getting Past The Hype: What Can AI Analytics Really Accomplish For Retailers?**, RSR Benchmark, September 2020
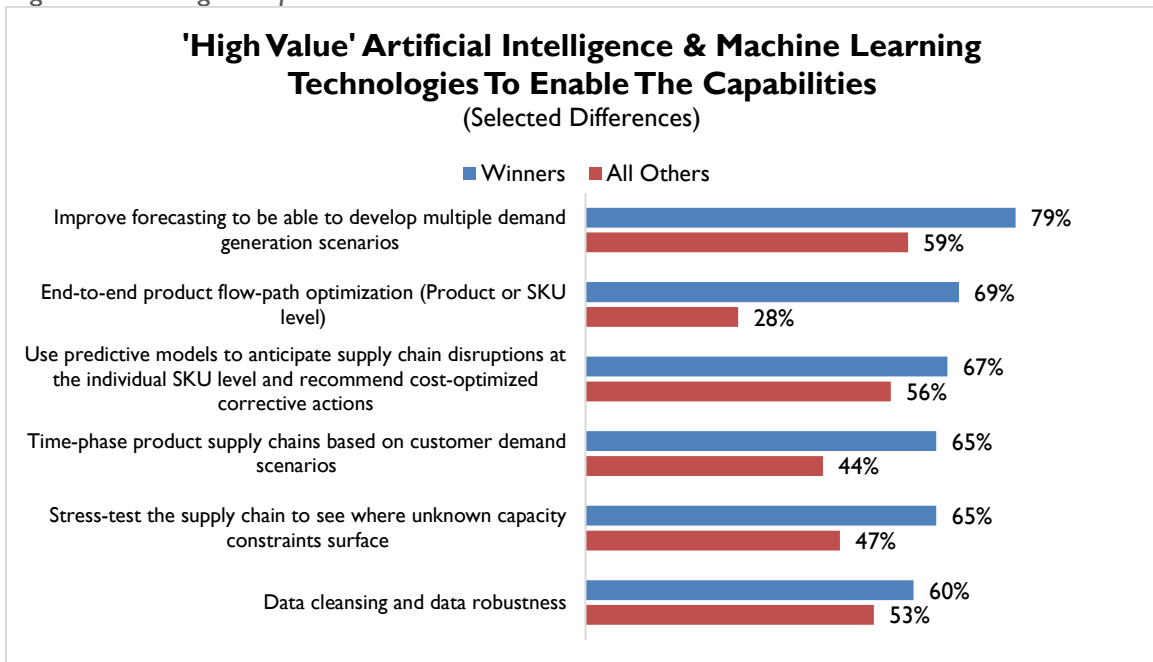
Figure 24: Change Is Going to Come

Rate The Importance Of Artificial Intelligence & Machine Learning Technologies In Enabling The Supply Chain
(Selected Capabilities)

■ High Value ■ Some Value ■ Little/No Value

Capability	High Value	Some Value	Little/No Value
Improve forecasting to be able to develop multiple demand generation scenarios	71%	26%	3%
Use predictive models to anticipate supply chain disruptions at the individual SKU level and recommend cost-optimized corrective actions	63%	35%	3%
Predictive analytics for supplier selection	60%	36%	4%
Data cleansing and data robustness	58%	38%	5%
Stress-test the supply chain to see where unknown capacity constraints surface	58%	40%	3%

Source: RSR Research, April 2023

It is perhaps surprising how quickly artificial intelligence and machine learning have become high-value technologies for retailers. And as Figure 25 shows, more Winners than average and under-performers assign a high value to AI/ML to enable specific capabilities to address certain capabilities.

Figure 25: High Expectations

'High Value' Artificial Intelligence & Machine Learning Technologies To Enable The Capabilities
(Selected Differences)

■ Winners ■ All Others

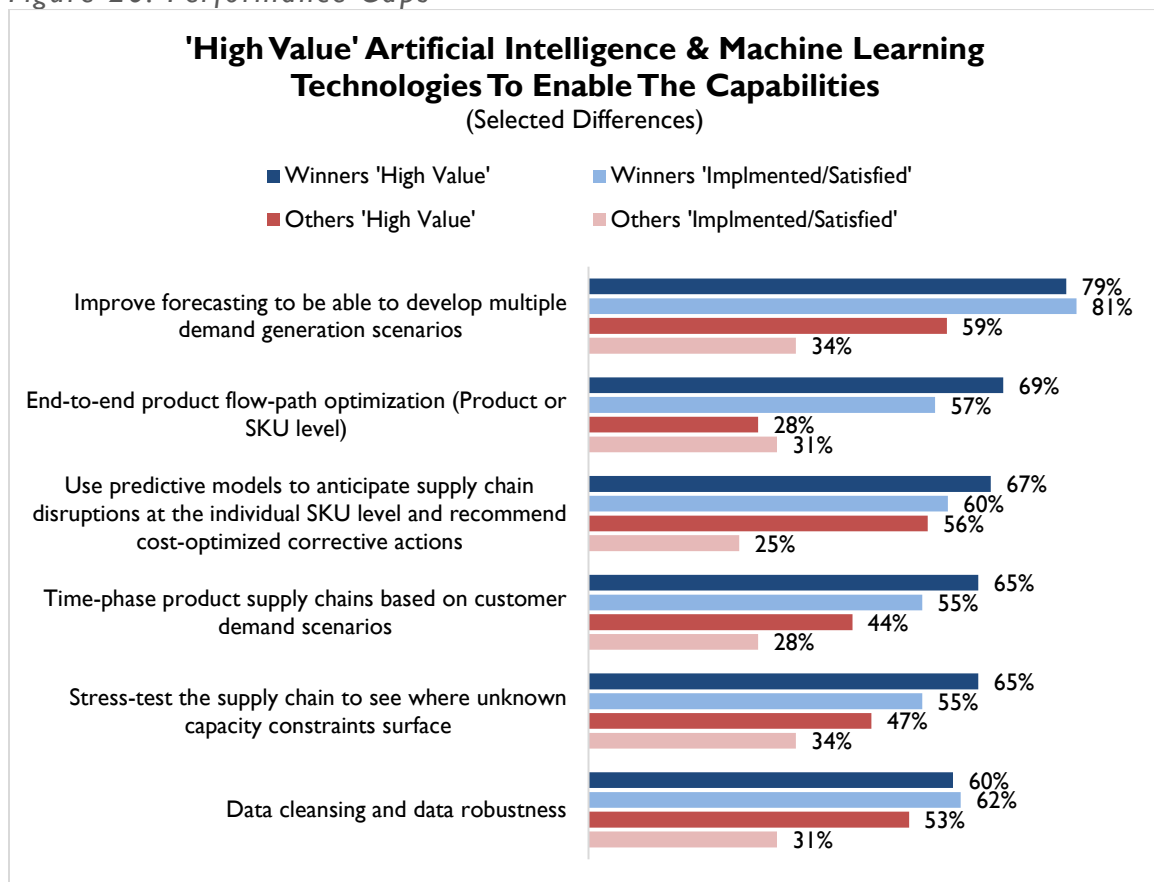| Capability	Winners	All Others
Improve forecasting to be able to develop multiple demand generation scenarios	79%	59%
End-to-end product flow-path optimization (Product or SKU level)	69%	28%
Use predictive models to anticipate supply chain disruptions at the individual SKU level and recommend cost-optimized corrective actions	67%	56%
Time-phase product supply chains based on customer demand scenarios	65%	44%
Stress-test the supply chain to see where unknown capacity constraints surface	65%	47%
Data cleansing and data robustness	60%	53%

Source: RSR Research, April 2023

In the wake of all the changes and disruptions that have occurred since 2020, retailers are viewing AI/ML as the best technology to help them address several nagging challenges – but most prominently, *improved forecasting.* This finding aligns with the top business opportunity that retailers identified earlier in this report. In retailers' view, "*improved forecasting"* is the "what", and "*to be able to develop multiple demand generation scenarios"* with AI/ML is the "how".

One of the most consistent differences between performance groups that RSR has observed over the past fifteen years is that Retail Winners view the information asset as a strategic weapon – an essential tool to help them stay on top, while average and under-performing companies use the information asset tactically – essentially to control operations. While Figure 22 shows that average and under-performers track fairly closely to Winners in the value they assign to AI/ML enabled analytical capabilities, looking at the same list and showing actual progress-to-date tells an entirely different story (Figure 26).
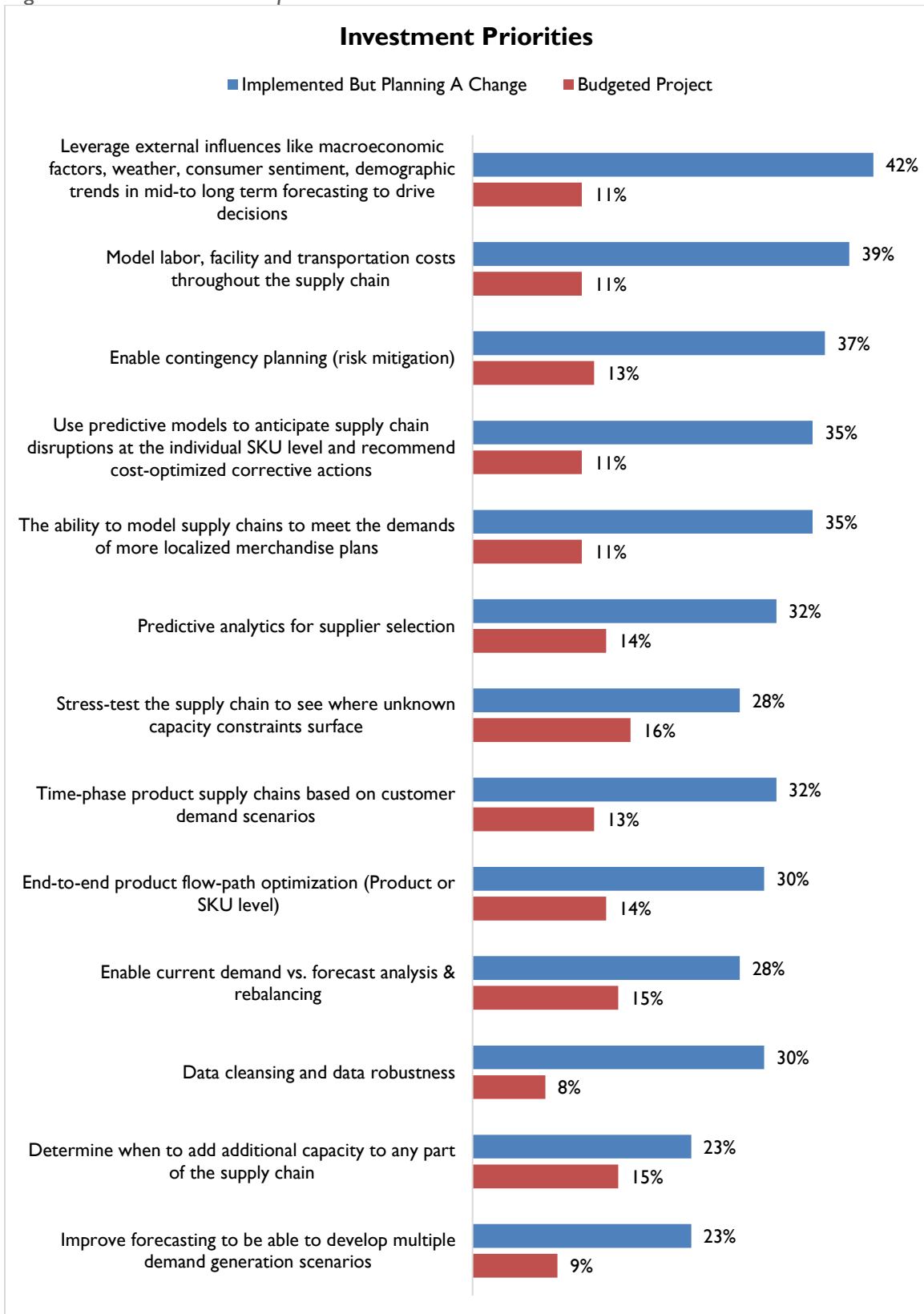
Figure 26: Performance Gaps

'High Value' Artificial Intelligence & Machine Learning Technologies To Enable The Capabilities
(Selected Differences)

- ■ Winners 'High Value'
- ■ Winners 'Implmented/Satisfied'
- ■ Others 'High Value'
- ■ Others 'Implmented/Satisfied'

Improve forecasting to be able to develop multiple demand generation scenarios
- 79%
- 81%
- 59%
- 34%

End-to-end product flow-path optimization (Product or SKU level)
- 69%
- 57%
- 28%
- 31%

Use predictive models to anticipate supply chain disruptions at the individual SKU level and recommend cost-optimized corrective actions
- 67%
- 60%
- 56%
- 25%

Time-phase product supply chains based on customer demand scenarios
- 65%
- 55%
- 44%
- 28%

Stress-test the supply chain to see where unknown capacity constraints surface
- 65%
- 55%
- 47%
- 34%

Data cleansing and data robustness
- 60%
- 62%
- 53%
- 31%

Source: RSR Research, April 2023

What Capabilities Are Retailers Prioritizing?

Given the value that retailers put on technology's ability to enable more agile and resilient supply chains – and the differences between how far Winners and others have progressed, our final question was, "what's the roadmap?" While the list of priorities is long, "forecasting" remains top-of-mind for the response group in aggregate (Figure 27).

Figure 27: The Roadmap

Investment Priorities

■ Implemented But Planning A Change   ■ Budgeted Project

Priority	Implemented But Planning A Change	Budgeted Project
Leverage external influences like macroeconomic factors, weather, consumer sentiment, demographic trends in mid-to long term forecasting to drive decisions	42%	11%
Model labor, facility and transportation costs throughout the supply chain	39%	11%
Enable contingency planning (risk mitigation)	37%	13%
Use predictive models to anticipate supply chain disruptions at the individual SKU level and recommend cost-optimized corrective actions	35%	11%
The ability to model supply chains to meet the demands of more localized merchandise plans	35%	11%
Predictive analytics for supplier selection	32%	14%
Stress-test the supply chain to see where unknown capacity constraints surface	28%	16%
Time-phase product supply chains based on customer demand scenarios	32%	13%
End-to-end product flow-path optimization (Product or SKU level)	30%	14%
Enable current demand vs. forecast analysis & rebalancing	28%	15%
Data cleansing and data robustness	30%	8%
Determine when to add additional capacity to any part of the supply chain	23%	15%
Improve forecasting to be able to develop multiple demand generation scenarios	23%	9%

Source: RSR Research, April 2023

An Ounce Of Prevention

As we've already seen, improvements to forecasting capabilities are top of mind for retailers generally. But once again, Winners lead the way. When it comes to capabilities that they plan to either re-invest in or have new budget money set aside for, overperformers' top-two priorities are:

1. *Have the ability to leverage external influences like macroeconomic factors, weather, consumer sentiment, demographic trends in mid-to long term forecasting to drive supply chain decisions;*
2. *Enable current demand vs. forecast analysis & rebalancing.*

Average and under-performers however are focused on the following top-two choices:

1. *Model labor, facility and transportation costs throughout the supply chain;*
2. *Use predictive models to anticipate supply chain disruptions at the individual SKU level and recommend cost-optimized corrective actions.*

The message that Winners are conveying is that while enabling supply chain **resilience** (the ability to respond to supply chain shocks) is important for the business, **agility** (the ability to quickly adjust to changes in demand) is more important to enable. Clearly, the underlying belief is that "*an ounce of prevention is worth a pound of cure*".

And that brings us to our recommendations.

BOOTstrap Recommendations

In light of all we have seen in this report, we offer the following baseline suggestions for retailers of all sizes and types.

Acknowledge The Situation

All throughout the COVID-19 pandemic, there was a lot of musing – not just in retail – about when life would "return to normal". While many things have, indeed, resumed to look much like they once were (real estate markets, airline travel, financial markets to a certain degree), the retail supply chain is not **and will never be** one of them. Gone are the days of old, when efficiency reigned supreme, and retailers that revert to the practices that have served them so well for decades will suffer immeasurably. Much of what made a supply chain great just 5 years ago would hurt a brand today. Flexibility is now key and will only become *that much more important* as time marches on.

Rethink Many – If Not All – Of The Old Ways

As we discuss throughout this report, supply "chains" are not the way forward: ***supply networks are***. As a result of this new reality, many of the old ways need to be supplanted – at both the technology ***and the process*** levels. The best retailers in this study say the best way forward is to lean on new analytics that help them measure supply chain activity (a tool) and that the only way that can ever happen is if they get more top-level involvement in their overall supply chain strategy. The tools simply cannot be leveraged without considerable reshuffling of the processes. This same "tools AND people" rethink extends to many of the areas within this study: forecasting tools need executives to understand why they are important, AI tools need business leaders to be involved in their justification to even be considered in the first place. Supply chain is no longer the concern of folks with the words "supply chain" their titles. These are brand-critical initiatives now.

Consider The Shopper

It may not always be appropriate, but with "transparency" often serving as a baseline expectation in modern society, addressing past mistakes made may well go a long way with shoppers. Keep in mind: this is a bold tactic, and not for every brand. But for those who are looking to foster a more open communication stream with their core consumers (and perhaps earn new ones), many brands have benefitted from addressing – head-on – any of the myriad ways they let shoppers down during the pandemic. It is worth noting: the mea-culpa is only part of the conversation: the real value is in addressing the changes that have been made to ensure that such let-downs won't happen again. The first part of the message is not worth delivering if the second part cannot be proven.

Understand Where Green Is Going

Consumers have made their feelings about environmental issues crystal clear to us in our research: "green" isn't about longwinded stories, and at its core, it's not even about issues that may be out of site to them (the state of workers involved in product manufacture, the emissions required to bring those products to market, or in many cases – even the state of the planet, itself). Instead, the messages that resonate most with them are directly related to something far more personal: their health. If products are better for their health – in any measurable way – they are willing to pay more. If that message can be folded into your supply chain strategy, emphasize it wherever and whenever possible.

Forecast, Forecast, Forecast

In a truly uncertain time, the ability to forecast – and adjust those forecasts – is every retailer's absolute best defense to uncertain and dynamic consumer demand. If your brand has the ability to lean into advanced analytics and forecasting tools more than you currently are, now is the time. If the brand does not have the tools or personnel to do so, there is no finer area in which to invest. Uncertainly looms aplenty: the brands that will survive the next major event will be the ones left standing in the arena.

Get Past Any Remaining AI Skepticism

Lastly, much has been made in recent months – in both hopeful and downright cataclysmic tones – of artificial intelligence and machine learning technologies. These tools are undeniably progressing at a dizzying rate, and the full range of corresponding emotions and reactions rides right alongside that pace. However, it is important to ***regard these tools for exactly what they are: tools***. Advanced tools, but tools nonetheless. And as it stands, AI and ML technologies are currently some of the best tools that retailers have at their disposal to try and sense – and react – to uncertainty. Embrace them as exactly that. Many of your competitors already have.

Appendix A: The BOOT Methodology©

The BOOT Methodology© is designed to reveal and prioritize the following:

- **B**usiness Challenges – Retailers of all shapes and sizes face significant **external** challenges. These issues provide a business context for the subject being discussed and drive decision-making across the enterprise.
- **O**pportunities – Every challenge brings with it a set of opportunities, or ways to change and overcome that challenge. **The ways retailers turn business challenges into opportunities often define the difference between Winners and "also-rans."** Within the BOOT, we can also identify opportunities missed – and describe leading edge models we believe drive success.
- **O**rganizational Inhibitors – Even as enterprises find opportunities to overcome their external challenges, they may find **internal** organizational inhibitors that keep them from executing on their vision. Opportunities can be found to overcome these inhibitors as well. Winning Retailers understand their organizational inhibitors and find creative, effective ways to overcome them.
- **T**echnology Enablers – If a company can overcome its organizational inhibitors, it can use technology as an enabler to take advantage of the opportunities it identifies. Retail Winners are most adept at judiciously and effectively using these enablers, often far earlier than their peers.

A graphical depiction of the BOOT Methodology© follows:
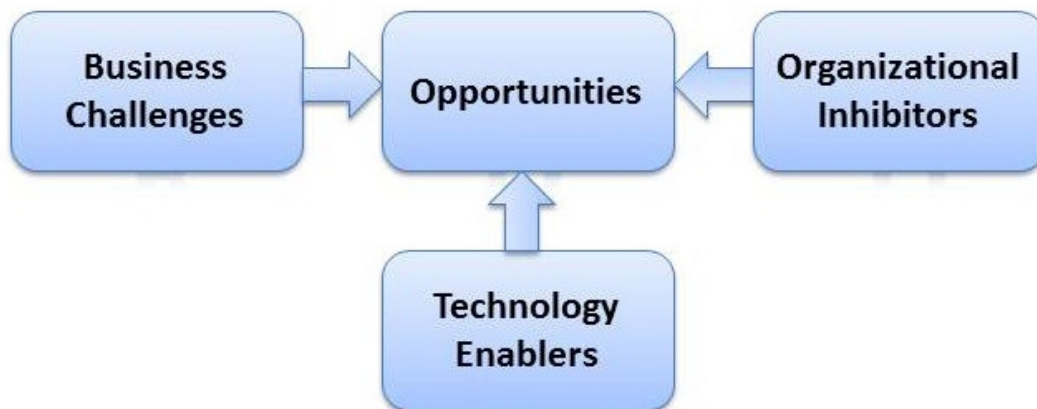
Appendix B: About Our Partner

IORMA (the International Omni Research Markets Association) is a Foresight Research Organisation concerned with future trends in Global Consumer Commerce and the impacts of evolving disruptive technologies.

IORMA provides a range of services to assist organizations, businesses, governments and academia in preparing for the future (and avoiding surprises). It is a "beacon of future positive hope", identifying the accelerating and evolutionary future fusion of global advanced technology with global humanity - and all the positive hope that brings to humanity for a progressively better New World. To learn more, visit https://iorma.com/.

Appendix C: About RSR Research

Retail Systems Research ("RSR") is the only research company run by retailers for the retail industry. RSR provides insight into business and technology challenges facing the extended retail industry, providing thought leadership and advice on navigating these challenges for specific companies and the industry at large. We do this by:

- **Identifying information** that helps retailers and their trading partners to build more efficient and profitable businesses;

- **Identifying industry issues** that solutions providers must address to be relevant in the extended retail industry;

- **Providing insight and analysis** about a broad spectrum of issues and trends in the Extended Retail Industry.