

Are Retail Supply Chains Ready For Tumultuous Times?

Benchmark Report

By Brian Kilcourse and Steve Rowen, Managing Partners

July 2025

Sponsored by:



Presented in partnership with:



Executive Summary

Key Findings

The data for this research was collected just prior to the imposition of sweeping tariffs by the United States in late April 2025. When the research was conducted, retailers and their suppliers indeed knew change was coming – but *they did not yet know the details*.

Now, in July 2025, the confusion that was swirling around supply chain activities *then* continues. Our industry still does not know much more about the details, as fluctuations in policies and market swing wildly from one week to the next.

The following are some of the highlights from this report:

- When it comes to **Operational Challenges**, retailers' top concern is that rapid changes in consumer demand are already undercutting their ability to buy big and lower costs. On the supply side, the biggest challenge is securing availability of supply. Even before an environment of widespread tariffs kicked in, the very hint of it coming to fruition had retailers starting to investigate alternative sources of supply closer to home.
- Retailers' supply chains have made tremendous improvements since the dramatic shocks and resulting lessons learned from the COVID-19 pandemic. The best performers (what RSR calls Retail Winners) have spent the past few years with an outsized focus on building agility into their supply chains as result – 93% put high value in alerts on unexpected supply shortages, 73% into new demand forecasting tools. These Winners perceive entirely different **Opportunities** than average and under-performers do.
- However, there is more work to be done to make most retailers' supply chain resilient – the top 3 **Organizational Inhibitors** that retailers cite are #1: lacking visibility at key points along their supply network, #2: dependence on shippers to manage disruptions, and #3: legacy systems that are too fractured to respond. It will be very tough for brands in such situations to weather the type of trade chaos that appears inevitable.
- When it comes to **Technology Enablers**, our respondents couldn't be more clear: technologies that improve forecasting by offering multiple different scenarios based on fluctuations in demand are the way through all of this. Unfortunately, not enough have implemented these tools yet – and for those that have, they don't have enough experience with them to fully trust their suggestions yet. Retailers are behind here.

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

Table of Contents

Research Overview	1
The Rate Of Change Is Accelerating	1
The New Baseline	2
Why Winners Win	3
How Consumer Attitudes Affect Supply Chain Agility	5
Survey Respondent Characteristics	7
Business Challenges	9
Feeling Pretty Good	9
The Effect Of Business Challenges on Operations	11
The Challenge Ahead	12
Opportunities	14
Beyond Merely Surviving	14
The Business Objective	16
Organizational Inhibitors	18
Incomplete Pictures	18
Technology Enablers	20
Models And Forecasts, Please	20
Tech In Need.....	21
On Agility	22
BOOTstrap Recommendations	25
Acknowledge The Chaos	25
Get On With It	25
Trust In The Predictive And Exception-handling Technologies You've Purchased.....	25
Share The Burden/Share The Reward	25
Appendix A: The BOOT Methodology®	i
Appendix B: About Our Sponsor	ii
Appendix C: About Our Partner	ii
Appendix D: About RSR Research.....	iii

Figures

Figure 1: Chipping Away	3
Figure 2: A Matter Of Focus	4
Figure 3: Anticipating Rather Than Merely Reacting.....	5
Figure 4: Vertical Perspectives.....	6
Figure 5: Seemingly Under Control	9
Figure 6: Better Collaboration Is Needed... ..	10
Figure 7: ... To Achieve New Levels Of Speed & Agility.....	10
Figure 8: Actionable Challenges.....	10
Figure 9: Pushed From Pillar To Post	11
Figure 10: Actionable Challenges.....	12
Figure 11: Priorities	14
Figure 12: Emphasis.....	15
Figure 13: Sense-And-Respond.....	16
Figure 14: Shaking Out Extraneous Costs	17
Figure 15: An Insufficient Knowledge Base.....	18
Figure 16: Meaningful Change Will Require New Ways Of Thinking About The Supply Chain....	19
Figure 17: The Power Is In Simulation	20
Figure 18: High On Value, Low On Supply	21
Figure 19: Kinda, Sorta.....	23

Research Overview

The Rate Of Change Is Accelerating

RSR has benchmarked the challenges and opportunities that retailers face on the supply side of their businesses since our inception in 2007. In our early reports the issues being assessed were driven by an economic singularity – the Great Recession of 2008-12 – when cash strapped shoppers around the world began using their new always-connected “smart” mobile devices to inform purchase decisions of all kinds. That combination of economic hardship and consumer technology enablement changed the face of retail forever.

Even before 2008, retailers were aware that they needed to accommodate a world where new sources of demand had to be fulfilled in new ways. But the recession and widespread consumer adoption of mobile technology accelerated the transformation of eCommerce selling channels from stand-beside operations with minor impact on sales, into strategic components of a unified selling environment. This was the *omnichannel* agenda, and by 2012 RSR’s research was able to highlight the fact that most retailers were acting on that imperative.

While the **selling** (customer facing) side of the retail business model was metamorphizing, changes on the **supply side** of the business were accelerating too. Old notions of stable and reliable supply chains were giving way to *supply ecosystems* that could (in theory) respond very quickly to changes in either demand or supply. Supply ecosystems were enabled by huge technological improvements that enabled real-time visibility into the flow of products and the automation of in-cycle corrective responses to exception conditions. In 2014, RSR identified the supply chain as “the next big thing” – the most important strategic agenda for omnichannel retailers to address going forward.

Just as the Great Recession of 2008-12 accelerated changes in the selling environment, the COVID-19 pandemic of 2020-22 accelerated changes on the supply side of the retail enterprise. Coming out of the pandemic period, retailers in our April 2023 supply chain benchmark report told us that they were focusing on using new data available to them and new analytical tools powered by AI/ML¹ to implement these priority capabilities:

- Improving forecasting to be able to develop multiple demand generation scenarios
- End-to-end product flow-path optimization
- Using predictive models to anticipate supply chain disruptions at the individual SKU level and recommend cost-optimized corrective actions
- Time-phase product supply chains based on customer demand scenarios
- Stress-test the supply chain to see where unknown capacity constraints surface

But even given the importance of these new capabilities, RSR expressed a concern that retailers were aiming to make incremental improvements to existing processes rather than in undertaking a fundamental redesign to accommodate the demands of a highly volatile environment. We worried that, *“even with all the improvements that retailers are envisioning – <the supply side> 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,*

¹ “AI/ML”: Artificial Intelligence/Machine Learning

technology, and consumer expectations, have on where and how they will source products in the future.”²

The New Baseline

Year 2024 was a time of relative stability and growth for retailers and their suppliers, especially compared to the post-COVID disruptions to the retail supply chain in 2023 and the global COVID pandemic in 2020-22. For example, the Port of Los Angeles (the busiest container port for in the United States), experienced its 2nd highest all-time volume and a 20% increase over 2023. Container shipments overall to the U.S. increased 13% in 2024 compared to 2023, after 2023 volume had fallen 12% off the record highs experienced in 2022.

Like most industry observers, RSR hoped that the relatively calm conditions the industry enjoyed in 2024 would extend into the new year. Retailers pinned their plans on a continuing strong economy, high consumer confidence, low unemployment, and the resultant healthy sales. Retailers told us that they were in the process of making the technology improvements and operational changes needed to improve the agility and resilience of their supply chains.

But as the world has seen, the year 2025 has brought volatility back to the global trade environment. For international supply chains, clearly the US tariffs situation is likely to create some turbulence on the short term. Though what may ultimately result is more domestic sources for retailers, establishing those sources could take years. So it is fortuitous that RSR was able to take a snapshot of the state of the supply side of the retail business now, ***to establish a baseline from which to measure changes in the future.***

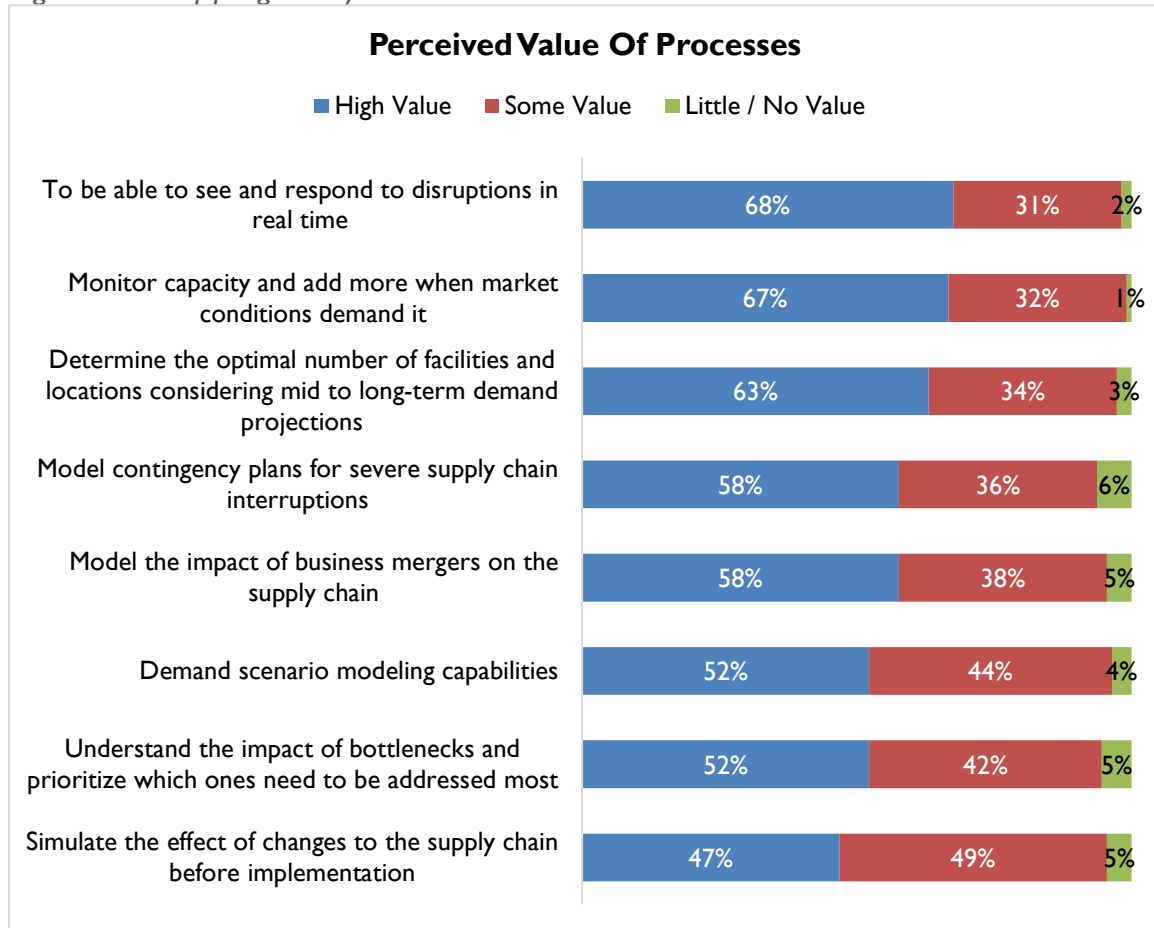
Will Tactical Improvements Have Been Enough?

The purpose of this, our latest inquiry into the state of the retail supply chain, was to take a snapshot of the supply chain and establish a new baseline. Our hypothesis was that barring major disruptions, retailers would continue in their efforts to harness the power of new information to enable a much more agile response to changes in either supply or demand. As we know now, however, in the weeks and months ahead, major disruptions to the global supply network seem inevitable: will the improvements retailers have made be enough?

According to the retailers that responded to the survey (111 retailers, primarily over \$500M in revenue), efforts have continued to enable faster responses to operational conditions, to monitor the flow of goods at a more granular level and to use modeling techniques to better anticipate supply chain interruptions and corrective actions (Figure 1).

² [The Quest For A Resilient And Agile Supply Network](#), RSR Benchmark Report, April 2023

Figure 1: Chipping Away



Source: RSR Research, July 2025

But just as we noted in our 2023 report, these are tactical improvements to existing processes rather than fundamental design changes. In RSR's 2020 supply chain report³ (published immediately before the COVID pandemic hit the world), less than 50% in the retailers survey strongly agreed with the statement that *"the globalization of retail has caused us to re-think our strategies"*. Notwithstanding all the disruptions that have occurred since then, most retailers still prefer to incrementally improve rather than to embark on a fundamental redesign of their supply infrastructure. At the end of 2024, retailers were clearly focused on improving operational execution in order to make adjustments during the selling season to ensure better sell-through.

Why Winners Win

Every retailer knows that while the value of the brand is established and reinforced on the *selling* (consumer facing) side of the business, how profitable that brand will be is largely determined by how well managed the *buying* (supply) side is. Walmart proved this point over 40 years ago when it led the industry in using scan data from point-of-sale systems to optimize assortments, "buy big" and pass cost-of-goods improvements on to consumers in the form of low prices. So in that sense,

³ 2020 RSR Supply Chain Management, RSR Benchmark Study, March 2020

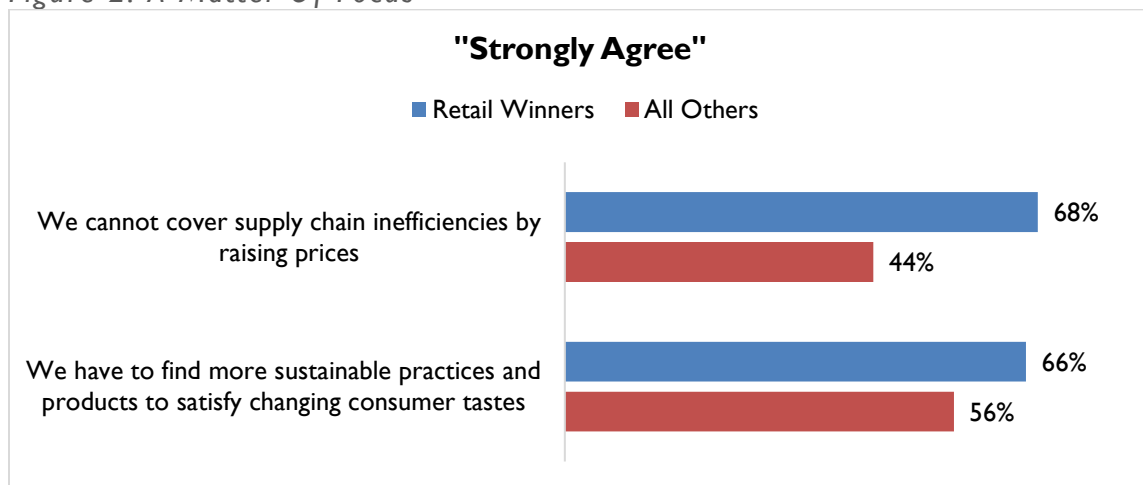
declaring the supply chain to be “the next big thing” (as RSR did in 2015) was a little hyperbolic – it has *always* been a big thing.

As we’ve come to expect, over-performing retailers are more clear on that point than others. In our benchmark reports, RSR frequently cites the differences between over-performers in year-over-year comparable sales and their competitors. RSR calls these over-performers “Retail Winners”.

RSR’s definition of these Winners is straightforward. Assuming industry average comparable store/channel sales growth of **5 percent in 2024**, 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*”. In our studies, RSR has consistently found that Retail Winners have different thought processes, strategies, and tactics than their under-performing competitors, that in turn result in higher sales.

Responses to this survey show that over-performers - Retail Winners – are more keenly attuned to consumer careabouts than other retailers are. This is consistent with the body of data that RSR has amassed over the years: *Winners maintain a relentless focus on the consumer as their first consideration*. When it comes to the challenges of today’s supply chain, over-performers understand that the cost of inefficiencies cannot be passed on to consumers, and that they need to constantly look for new sources of products to meet changing consumers tastes (Figure 2).

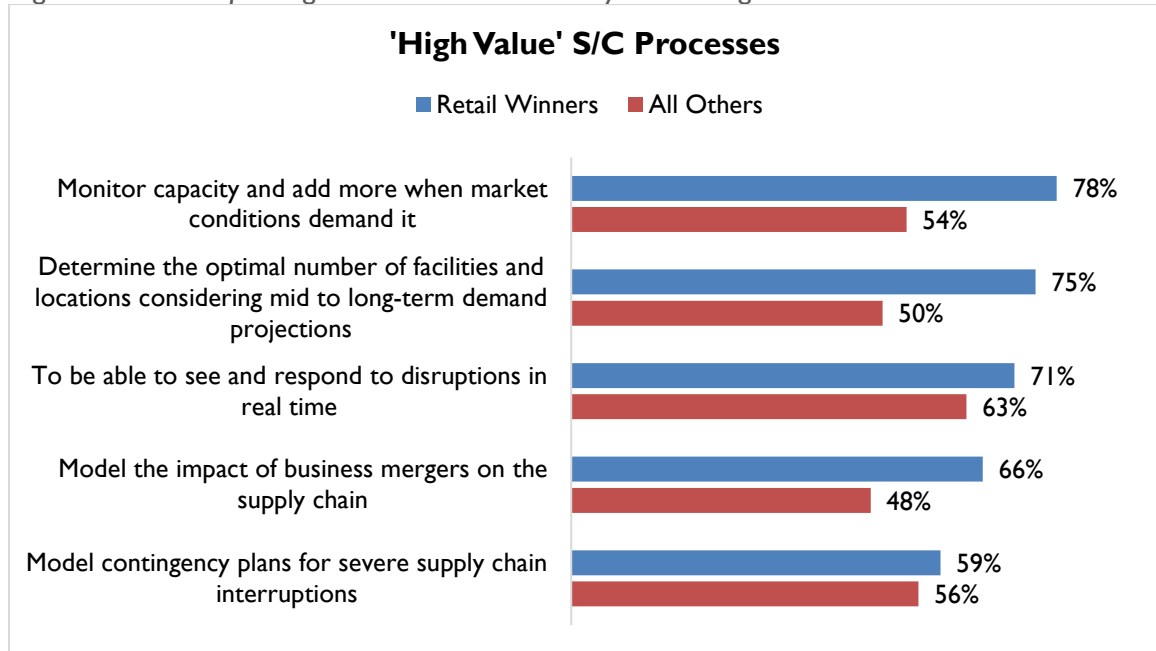
Figure 2: A Matter Of Focus



Source: RSR Research, July 2025

We can see this attitude reflected in value that Winners assign to supply chain processes. While most retailers agree that it’s vitally important to be able to see and respond to disruptions in real time, Retail Winners want more, to be able to use mid and long-term demand projections and ensure that there is capacity when and where it will be needed before those disruptions inevitably occur (Figure 2).

Figure 3: Anticipating Rather Than Merely Reacting



Source: RSR Research, July 2025

It's an important distinction; retail is a fundamentally *reactive* business, but Winners want to be able to anticipate disruptions in order to have assets in place that can respond immediately to changes in either supply or demand.

How Consumer Attitudes Affect Supply Chain Agility

While Retail Winners are more attuned to consumer price sensitivity than average and under-performers are, it's also true that consumer attitudes have a big impact on most retailers' supply chain processes.

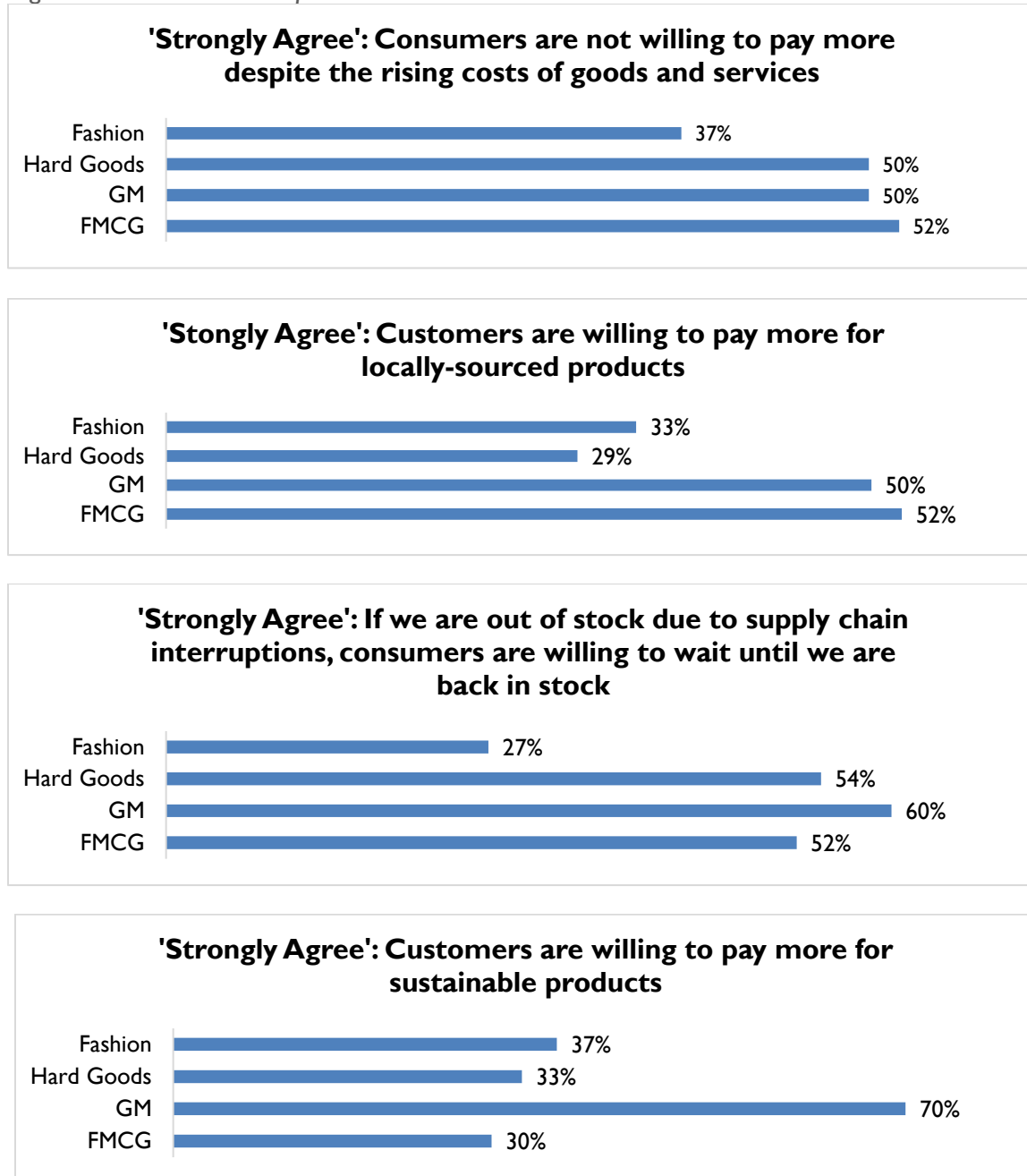
In 2022, RSR asked over 1000 U.S. based consumers about their tolerance for retailers' struggles to sell them what they want. As the following table shows, consumers are unforgiving:

	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

How demanding consumers affect supply chain decisions tend to vary by vertical (Figure 4).

Figure 4: Vertical Perspectives



Source: RSR Research, July 2025

What we can glean from these perspectives is that while consumers are willing to pay more for some additional value (sustainable products, locally sourced products) and they are only patient **to a point** when product they want aren't readily available because of supply chain interruptions. They won't pay more because a retailer is inefficient.

And that is the bottom line: *it's not about what retailers want to sell but about what consumers are willing to buy.*

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 early 2025 and received answers from 111 qualified retail respondents. Respondent demographics are as follows:

- **2024 Est. Revenue (US\$ Equivalent)**

\$51 million - \$249 million	9%
\$250 million - \$499 million	65%
\$500 million - \$999 million	20%
\$1 billion and above	6%
- **Products sold:**

FMCG (Convenience stores, Food & Drug, Health Care Products)	21%
Fashion & Specialty (Apparel, Footwear, Accessories, Luxury, Personal Care/Cosmetics)	27%
Hard Goods (Consumer Electronics, Home Décor, Home Improvement, Automotive)	43%
General Merchandise (Discount, Mass Merchant)	9%
- **Retail Presence:**

USA	100%
Canada	17%
Latin America	11%
UK	23%
Europe	12%
Middle East & Africa	2%
Asia/Pacific	2%
- **Year-Over-Year Sales Growth Rates (assume average growth of 5%):**

Average	47%
Better than average ("Retail Winners")	53%
- **Respondents Position Within The Organization**

Executive Level (C-Level)	65%
Senior Management (SVP)	20%
Middle Management (VP / Director)	14%
Line Manager & Other	2%
- **Functional Area of Responsibility**

Executive Management	27%
eCommerce/Direct Operations	10%
Finance, Legal, Human Resources	19%

Information Technology (IT)	18%
Data Science & Analytics	7%
Marketing, Merchandising, Supply Chain Operations	17%
Store Operations & Other	2%

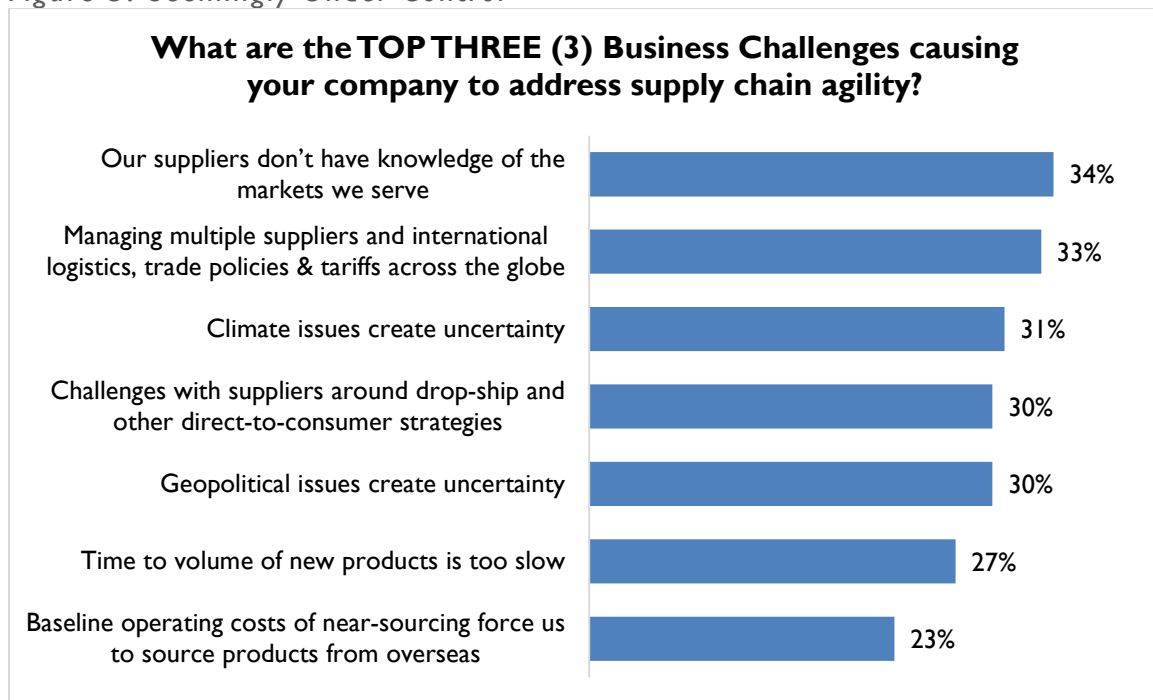
Business Challenges

Feeling Pretty Good

In 2023, retailers over-compensated for the constraints to both supply and demand that COVID had imposed, resulting in a phenomenon called “the bullwhip effect”, when retailers ended up holding more inventory than needed as they also struggled to deal with fluctuating supply chain costs. However, by the end of 2024 retailers were confident that they had managed to get their supply chains back in sync with the cadences of consumer demand.

At the beginning of 2025, when we asked retailers to identify the top three external business challenges affecting their supply chains, only one choice was identified by more than one-third of the retailers surveyed (Figure 5). Retailers were clearly feeling pretty good about the state of their supply chains.

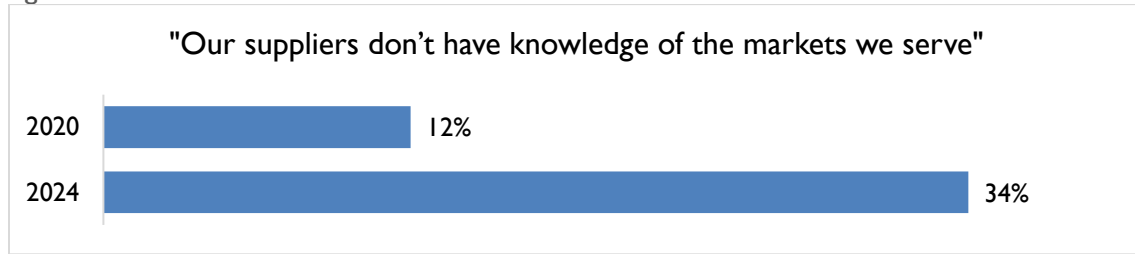
Figure 5: Seemingly Under Control



Source: RSR Research, July 2025

But beneath that rosy picture, we can see that some issues are growing in criticality. For example, the number one challenge (“our suppliers don't have knowledge of the markets we serve”) is a perennial issue that appears only to be getting worse (Figure 6).

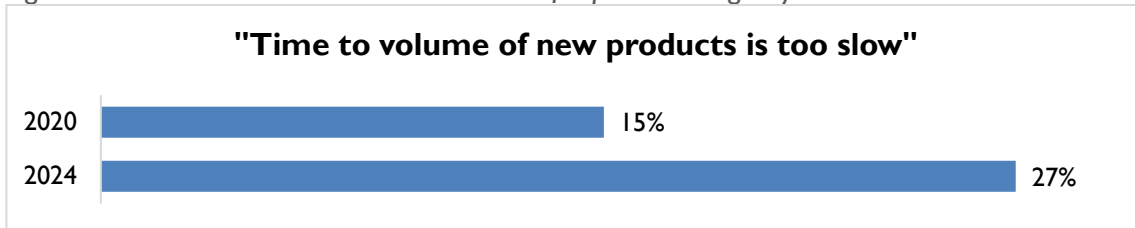
Figure 6: Better Collaboration Is Needed...



Source: RSR Research, July 2025

We get some sense of why this is becoming more of a challenge when looking at another data point, that "*Time to volume of new products is too slow*" (Figure 7). That issue is also becoming more vexing, and it underscores the need for better collaboration and synchronization between retailers and manufacturers.

Figure 7: ... To Achieve New Levels Of Speed & Agility



Source: RSR Research, July 2025

Why is better coordination and collaboration necessary? Retailers seek an *agile* response to changes in demand, and therefore are focused on using new data and analytical capabilities to forecast demand at a highly granular level- both pre-season and in-season. "Agility" is the strategic objective, and in this study we get a hint from more than one-third of retailers that they are looking for more active coordination with their suppliers to help them achieve that.

Figure 8 points out that over-performing Retail Winners are more concerned about this issue than average and under-performers are. While average and under-performers complain that their supply chains are complex, Winners have more specific and actionable challenges.

Figure 8: Actionable Challenges

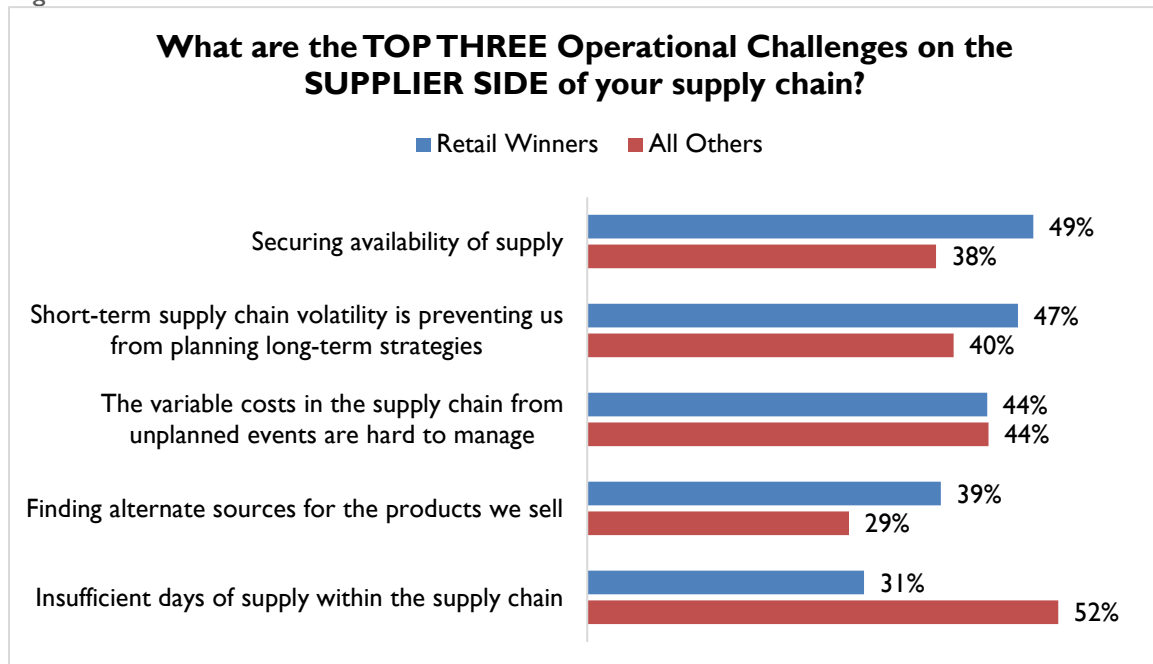


Source: RSR Research, July 2025

The Effect Of Business Challenges on Operations

Even before disruptive events in international trade began to unfold in 2025, retailers were already adjusting to a perceived need for faster, more agile supply chains. As we just saw, this has translated into pressure on suppliers to better synchronize production cycles with consumer demand (and by inference, also necessitating a free flowing exchange of information between the trading partners). But because retailers and their partners have needed to respond to short-term variations to either demand or supply, it has been harder for them to address longer-term strategies (Figure 9).

Figure 9: Pushed From Pillar To Post



Source: RSR Research, July 2025

While there is general agreement among the retailers in this study that supply chain volatility has made it difficult to control variable costs, it has also resulted in insufficient supply within the supply chain (that is, positioned to respond to near-term allocations and replenishments as needed), particularly for average and under-performers.

We get a little insight into why non-Winners struggle with that challenge when looking what is happening on the retail (customer) side of the supply chain (Figure 10). While retailers of all stripes worry that positioning themselves to be able to respond to dynamic demand may undercut their ability to lower the unit cost-of-goods by “buying big”, non-Winners in particular struggle with their inability to model supply and demand scenarios.

Figure 10: Actionable Challenges



Source: RSR Research, July 2025

As we'll see later in this report, virtually all retailers assign a high value to the ability to “*improve forecasting to be able to develop multiple demand generation scenarios*”. Many more Retail Winners than others have successfully implemented the analytical technologies to make that possible. That ability to test supply and demand scenarios is crucial to achieving the agility needed to prosper in uncertain times.

The Challenge Ahead

In our 2023 benchmark on the state of the Retail Supply Chain⁴, we summed up the opportunities this way:

“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.”

What retailers accomplished in 2023-24 was to incrementally improve supply chain operations by improving visibility into the flow of goods to be able to respond to supply interruptions more effectively, and by improving their demand forecasting capabilities to respond to sudden shifts in demand faster. These were important improvements, and the relative stability of the retail marketplace in 2024 gave retailers time to solidify them.

Whether those improvements will have been enough to help retailers weather the more tumultuous external challenges we're now experiencing in 2025 is a question for a future benchmark. At the beginning of this year, retailers felt good about their ability to meet and even exceed positive sales and profitability projections (in April 2025, the National Retail Federation projected that retail sales in 2025 would grow between 2.7% and 3.7% over 2024).

But at the time of this writing (May 2025), Walmart, the world's largest retailer, has warned that “*Walmart is preparing to raise prices in the US as soon as this month, as its own costs increase as*

⁴ The Quest For A Resilient And Agile Supply Network, RSR Benchmark Report, April 2023

a result of the new tariffs on imports imposed by President Donald Trump.” And in a different benchmark that RSR is conducting in May 2025, 85% of retailers queried indicate that their business has already been directly impacted by tariffs implemented in 2025.

Time will tell if the improvements made in 2024 will be up to new market challenges in 2025. In the remainder of this report, we’ll discuss the work still to be done to enable faster, more agile and resilient supply chains.

Opportunities

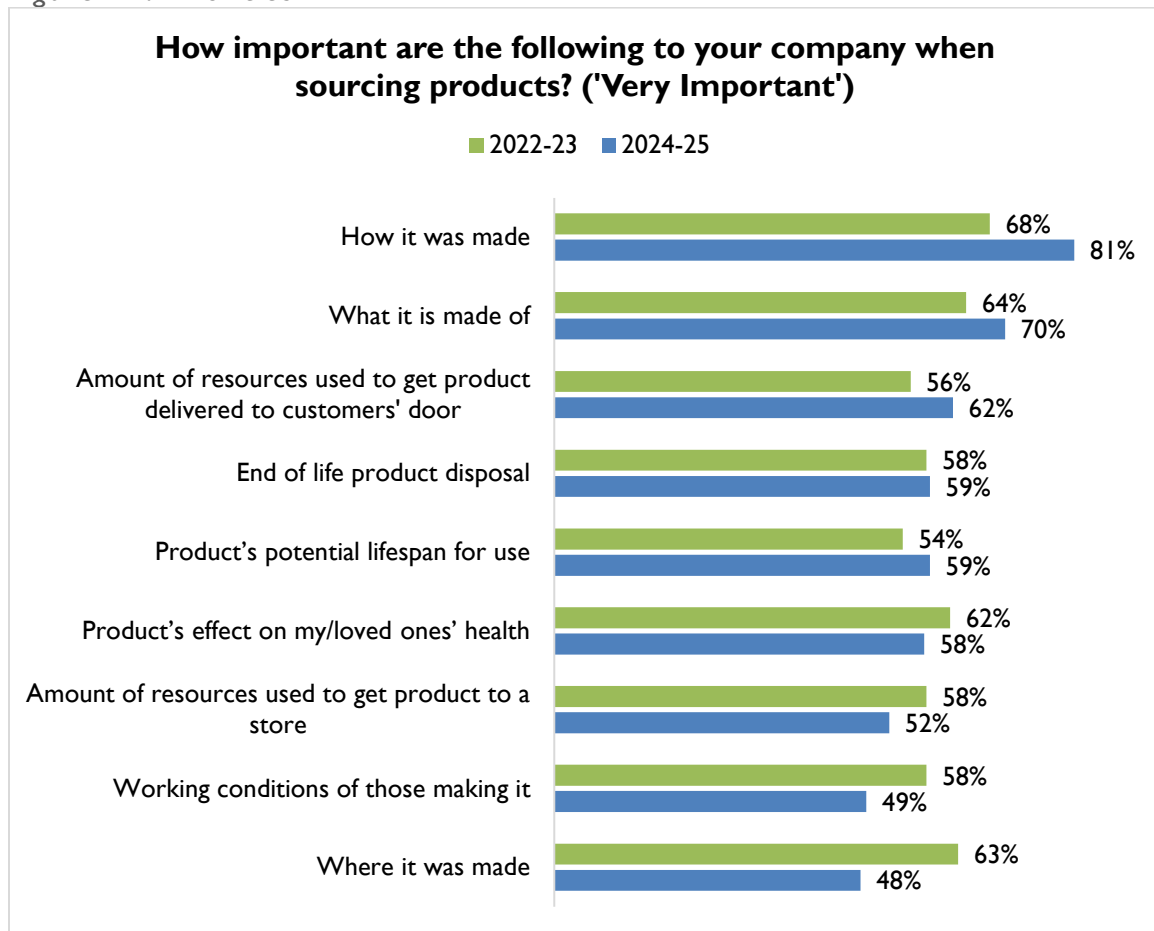
Beyond Merely Surviving

In the months immediately following the global pandemic (early 2023), supply chains were in disarray. The state of the retail supply chain had become a topic for kitchen table conversations around the world as daily news channels featured stories of container ships waiting offshore, sometime for weeks. The U.S. government even felt compelled to establish a *White House Council on Supply Chain Resilience*.

But as the year progressed, 2023 became a time for rebalancing the flow of supply to demand, and 2024 was a year for re-establishing market stability. Shifting retailer priorities are reflected in the importance that they assigned to various product attributes in 2023 and again at the end of 2024 (Figure 11).

While “*how it is made*” and “*what it is made of*” were the most important attributes in both years, “*where it is made*” was far more important to retailers when supply chains were struggling in 2023 than it was in 2024, when some semblance of normalcy had returned.

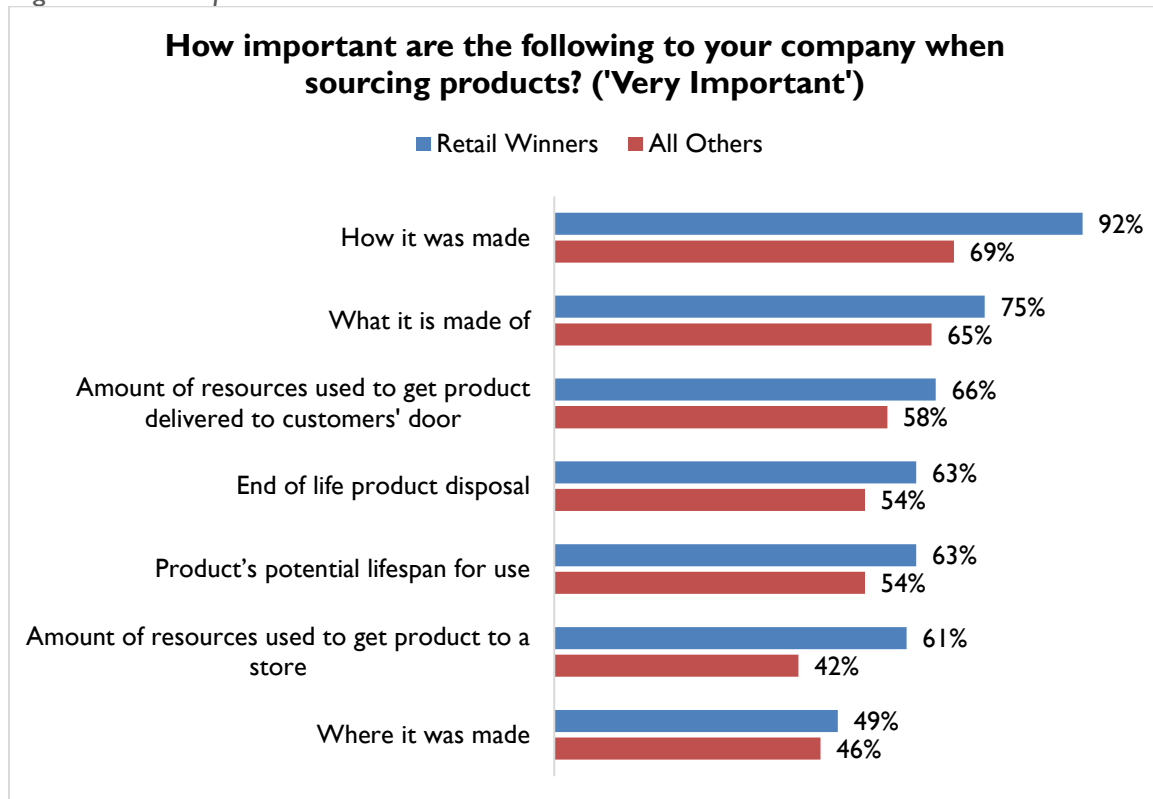
Figure 11: Priorities



Source: RSR Research, July 2025

RSR has often observed that Retail Winners pay more attention to value attributes beyond *price* and *availability* (Figure 12). For example, they are far more focused on product quality than average and under-performers are, and they are more sensitive to environmental issues associated with the products they sell (*end-of-life disposal issues, lifespan for use, amount of resources required to get products to store shelves*).

Figure 12: Emphasis



Source: RSR Research, July 2025

How a product is made, what it is made of, and even where it is made, are important considerations for discerning consumers – in that order. In a consumer-direct study RSR conducted at the end of 2022, consumers identified these priorities:

When thinking about products, how important are the following during your purchase decision?	Very Important
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%

RSR Research, December 2022

These value attributes are also important for retailers who want to stand out for the quality of their offerings. It also suggests that winning retailers must manage complex networks of suppliers, and

be willing to go to alternate sources when needed to maintain standards. Once again, *agility* is front and center.

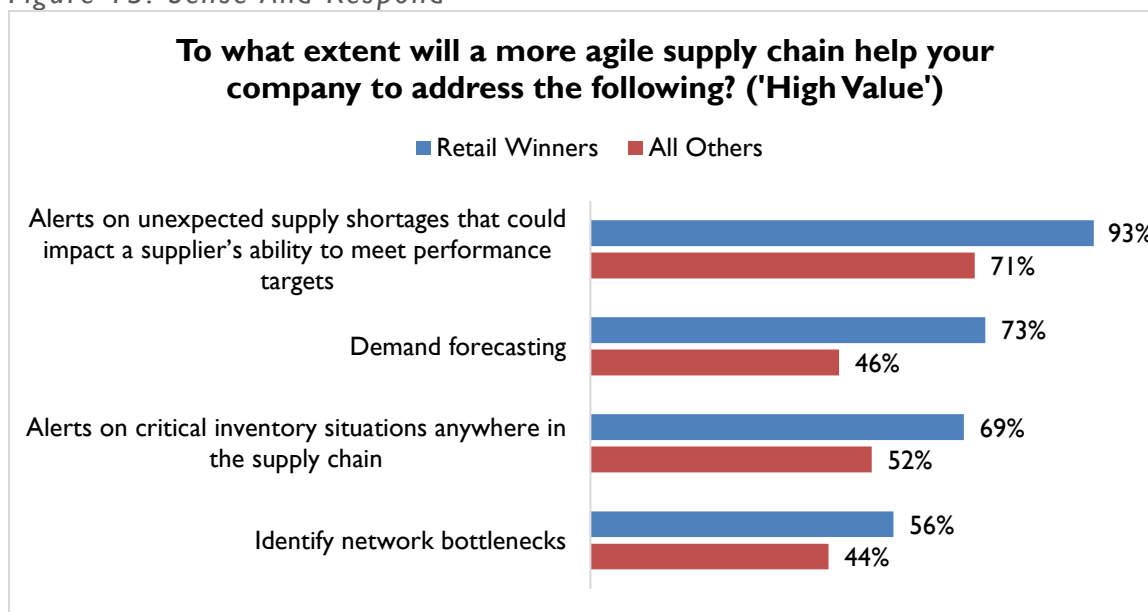
Still, it's important to note that at the beginning of 2025, before “tariff wars” became an issue, “*where a product is made*” trailed other considerations even for Winners. As we noted in the **Research Overview** section of this report, retailers expected that the relatively calm conditions the industry enjoyed in 2024 would extend into the new year, and that they would be able to focus on achieving new levels of speed and agility in their supply chain operations. Retailers were looking forward to being able to solidify the improvements that they had made to supply chain operations in the wake of the global pandemic.

The Business Objective

Within the context of each retailer's brand promise to consumers, primary business objectives all relate to being able to get inventory to the locations where it's most likely to sell at full price, at the right time and in the right quantities.

The quest for a more agile supply chain is clear when we asked retailers to assign a value to several capabilities (Figure 13). Somewhat surprisingly, almost 60% **more** Winners than non-winners remain focused on *demand forecasting* as a key enabler for a more agile supply chain. In RSR's 2025 benchmark on the state of merchandise planning⁵, retailers identified “*long-term product level forecasting* and *localized forecasting using predictive models that use new data*” as top opportunities. Winners clearly regard that capability as foundational.

Figure 13: Sense-And-Respond



Source: RSR Research, July 2025

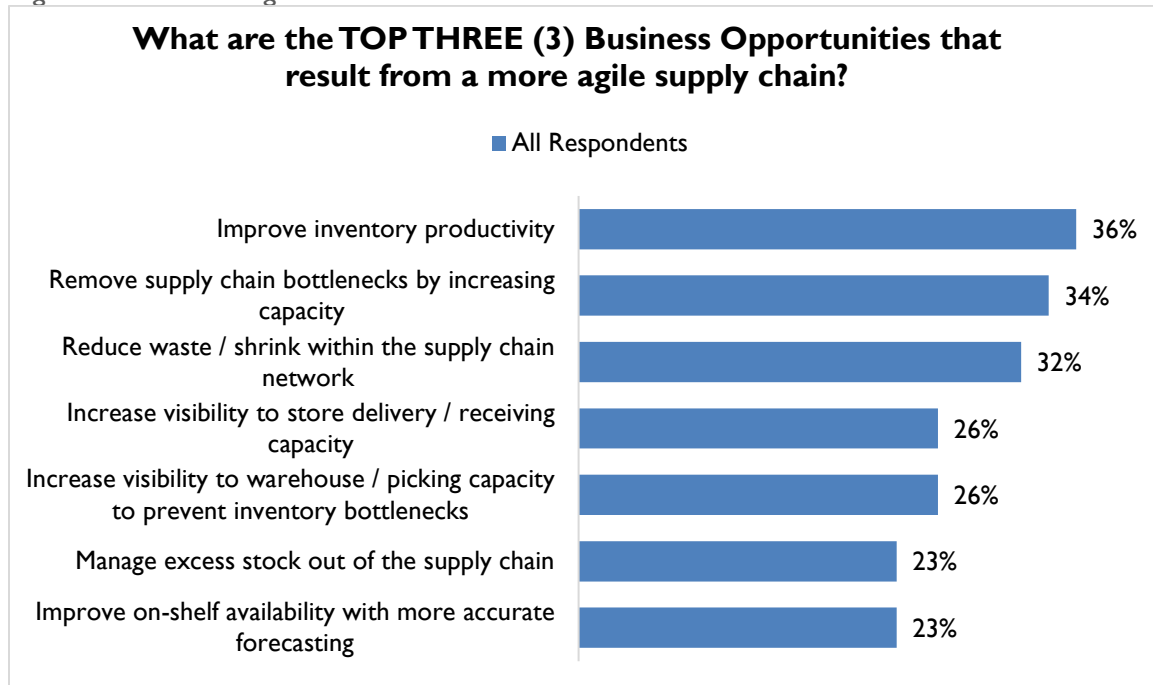
Beyond more precise demand forecasting, Winners place a great deal of emphasis on being able to **see** inside the supply chain in real time. This is the top objective of all the digitalization efforts

⁵ The Case For AI-Enabled Merchandise Planning 2025, RSR Benchmark Report, February 2025

that retailers have been engaged in for the past several years, and over-performers are clearly intent on taking advantage of it, to respond quickly to exceptions anywhere within the chain.

What are retailers trying to achieve? Simply put, **retailers want to maximize inventory productivity by minimizing the costs associated with carrying and handling that inventory.** (Figure 14).

Figure 14: Shaking Out Extraneous Costs



Source: RSR Research, July 2025

In the post-pandemic era, achieving that objective is dependent on two capabilities:

- The ability to plan and forecast at the SKU/location level, and to make in-season adjustments to allocations and replenishments when there are changes in either supply or demand
- The ability to see inside the supply chain in real time and take fast corrective actions when exceptions occur

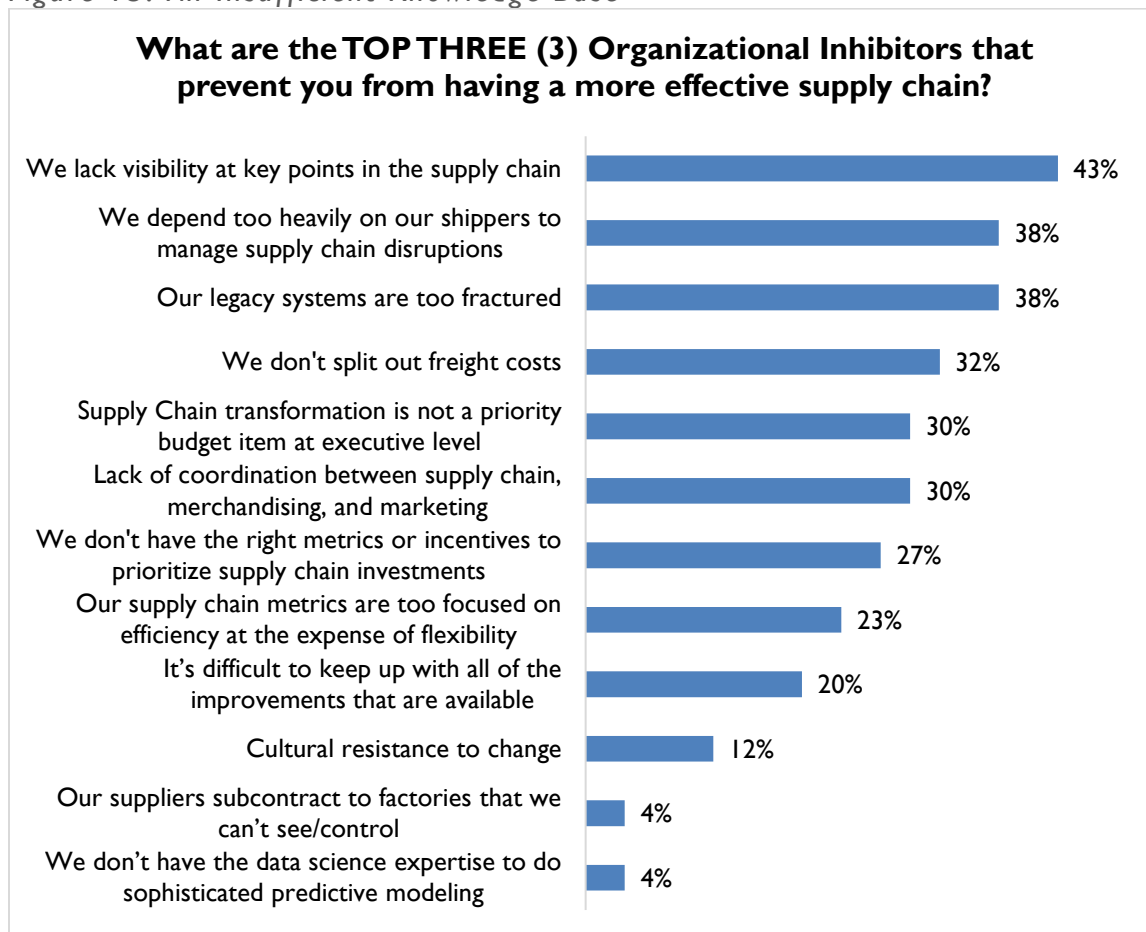
Achieving these objectives assumes a relatively stable marketplace that isn't hit by another pandemic, international conflicts, major environmental disasters, or escalating global political tensions. And at the beginning of 2025, retailers and their partners had every reason to believe that the market stability achieved in 2024 would continue.

Organizational Inhibitors

Incomplete Pictures

When it comes to the roadblocks preventing this study's respondents from making headway, they are hamstrung by a series of faltering prerequisites. They cannot see into vital points of their supply network, they rely too heavily on third parties to "fill in the blanks", and worse still – their own systems are so fractured that even if they could access this information, they couldn't make good use of it. Retailers are trying to make smart business decisions – quickly – based on thoroughly incomplete pictures.

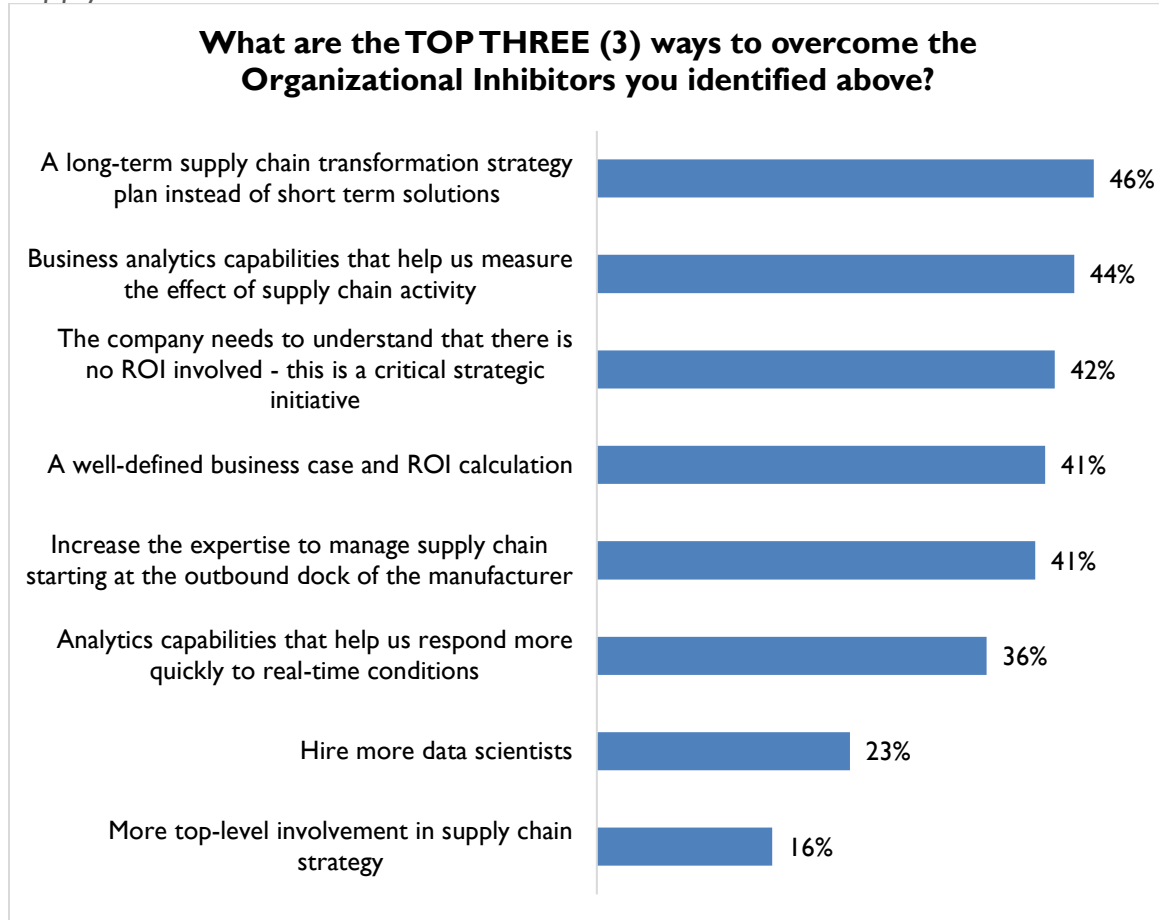
Figure 15: An Insufficient Knowledge Base



Source: RSR Research, July 2025

Our respondents are nothing if not honest: in order to achieve the goals they had lined up the beginning of the year, they are going to need a **lot** of help. Virtually none of what they shared with us in the **Opportunities** section of this report is possible in an environment where so many holes exist in the organization. A lack of coordination between supply chain, merchandising, and marketing is one thing (nearly 1 in 3 retailers cited this is a top challenge), but when nearly half of retailers (43%) say they simply cannot see what's happening at key points along a supply line's journey, the problems become intractable. As a result, the data in Figure 16 echoes that all much more loudly. Real improvement is going to require a *transformational shift* in the way retailers design their supply chains.

Figure 16: Meaningful Change Will Require New Ways Of Thinking About The Supply Chain



Source: RSR Research, July 2025

In many ways, this conclusion was inevitable. The good news is that as of the beginning of this year they seemed poised for deep and meaningful change. Let there be no doubt, however: *the echoing effects of the disruptions brought to global supply networks since the US's announcement of sweeping tariffs in April 2025 will have dramatic effect to these plans no matter what happens next.*

At the time of this publication (June 2025), the initial announcements of overwhelming triple-digit levies seem to have given way – for the time being – to somewhat more manageable and lower tariffs. The situation will remain static, however. Due to the unpredictable nature of political figures in power throughout the world, any outcome is still possible. Whether a full-scale global trade war erupts or relations between trade partners return to “business as usual”, the progress retailers seemed poised to make will likely be put on hold.

When the waters do calm, however, our retail respondents know that short term solutions are no longer a fix. Whether they want to *or not*, current events are requiring that they think about their supply networks in all new ways.

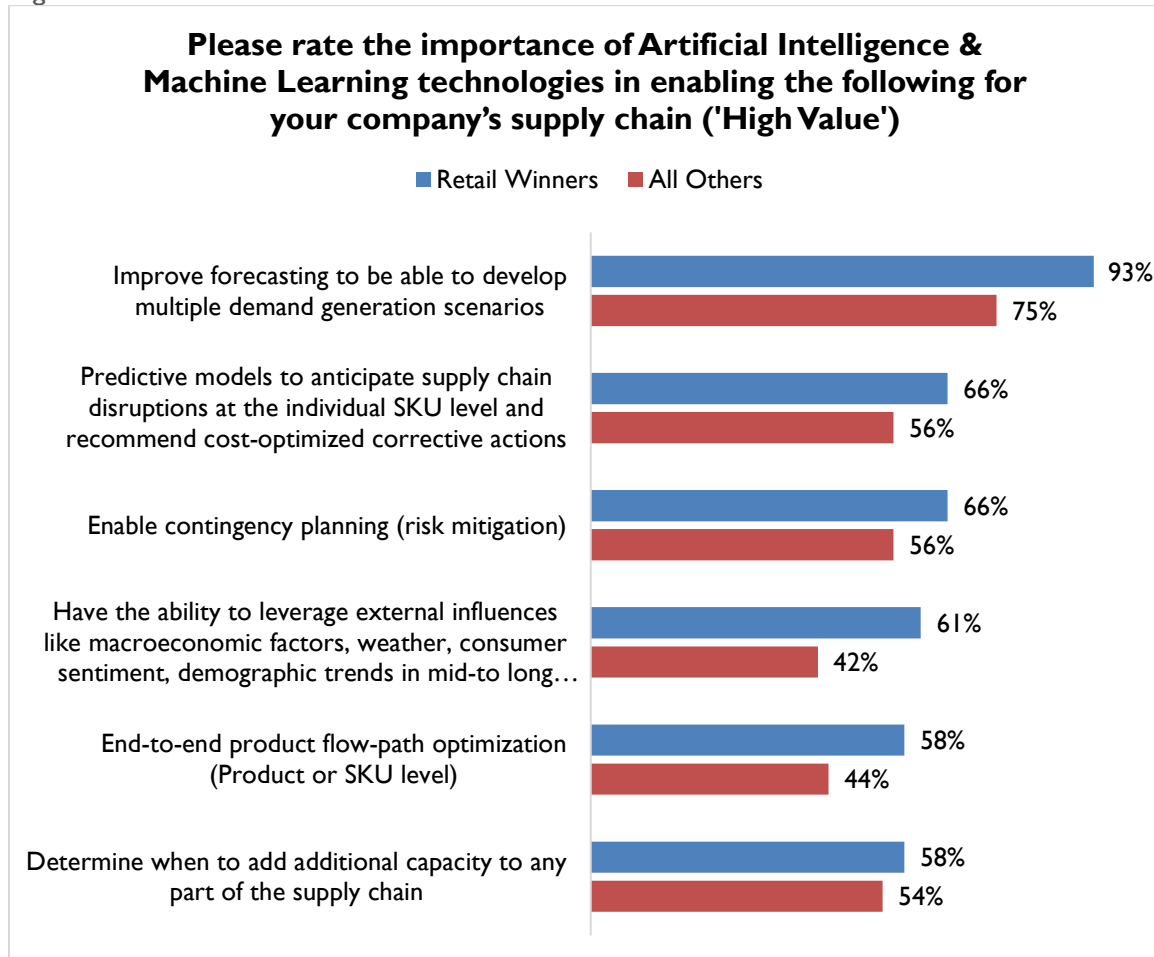
Transformation is underway. Now let's examine the ways technology can help.

Technology Enablers

Models And Forecasts, Please

While much of the technology industry's exuberance about AI and ML over recent years can be typified as "noise," retailers show time and again that they are no fools. They know precisely what tools are best positioned to help them accomplish their objectives – the only difference is that Winners understand these realities even more so (Figure 17)

Figure 17: The Power Is In Simulation



Source: RSR Research, July 2025

Despite all the exuberance in the popular press about artificial intelligence's ability to be creative, any scientist worth his/her salt will tell you that it cannot be. AI is limited by its ability to scan data that already exists. It cannot create – it can only curate. However, retailers (and their partners) have an **enormous** amount of data to mine about their operations, their customers, and all the exogenous components that affect the selling function (travel, weather, geopolitical events). AI and ML immediately present an opportunity to make better sense of all this data, and for Winners, in particular, that means the ability to model future states before they happen.

Retailers know the real power of these tools is to play out scenarios that effect – in order: 1) the products they carry (and plan to carry), 2) how delivery of those products could be affected (and

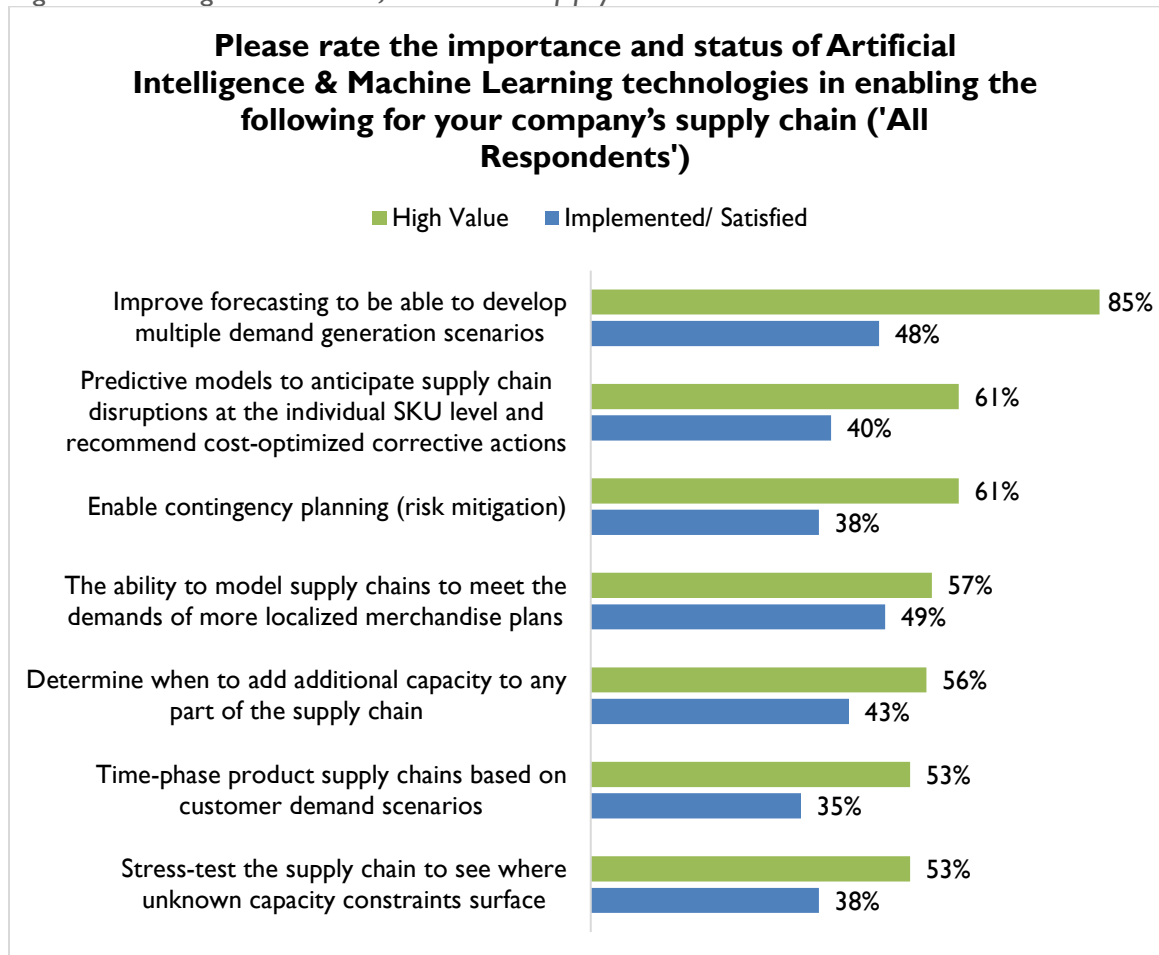
how to best react) when shock invariably hit the supply network, and 3) how they can limit their exposure to overall risk.

AI and ML are well suited to help them perform these tasks smarter, faster, and with less expertise. When it comes time to invest, retailers know exactly what they'll be looking for first.

Tech In Need

Despite the high value associated with the aforementioned AI & ML tools, a quick status report shows that our retail respondents still have a long road ahead to reap the full benefits (Figure 18).

Figure 18: High On Value, Low On Supply



Source: RSR Research, July 2025

This data is to be expected. As noted earlier, the tech industry has been singing the praises of Artificial Intelligence's capabilities for several years; "AI-washing" has been the main and recurring theme of the expo floor of NRF's annual Big Show in New York each January since 2017. Retailers have been taking it all in, separating the potential from the hype, and steadily narrowing their list of what holds value.

It is worth repeating that the COVID-19 pandemic of 2020/2021 – with its long-tail effects extending well into 2023/2024 – injected significant delays into these plans. That said, those troubles also helped underline the need to have a more holistic view of the supply chain – and to have more

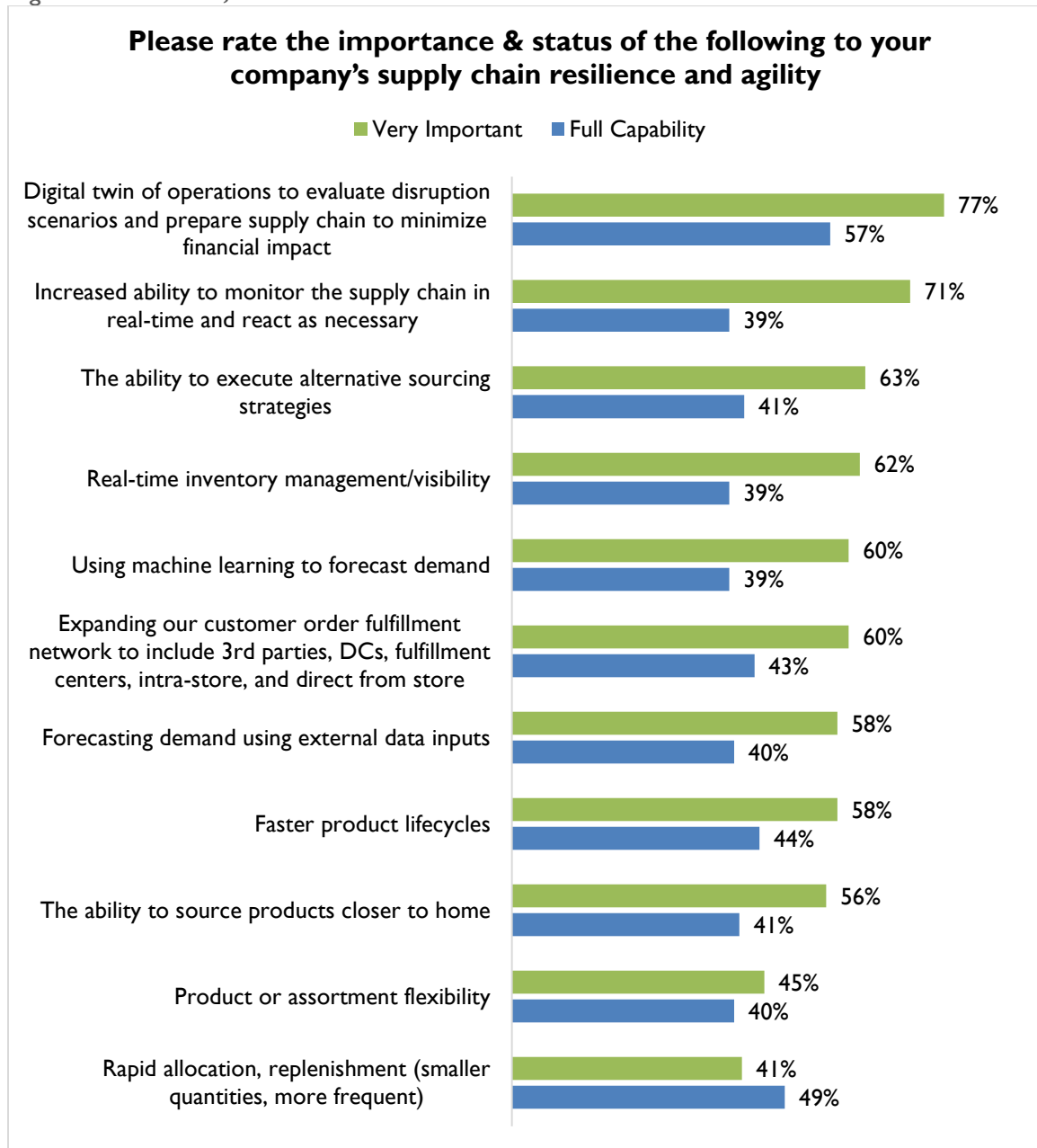
effective power over as many nodes along it as possible. The pandemic broke both supply chains *and* the existing plans to make them more robust – and stressed the importance of making those very networks more flexible in the first place.

With all of the tumult of the modern tariff war threatening to be the latest in the long line of impediments to forward progress, RSR hopes that when we conduct this research again next year, we will find that retailers have made up some of the delta that currently exists between what is valued – and what is being used to great effect.

On Agility

In light of all we have learned, it only makes sense that the final chart in this research addresses retailers' self-assessment referenced in the title of this report. Which aspects of the supply chain most require resiliency and agility? Which have they readied the most in advance of turmoil? In essence: are retailers' supply chains ready for tumultuous times? (Figure 19)

Figure 19: Kinda, Sorta



Source: RSR Research, July 2025

When asked what is most important to survive tumultuous times, more than three-quarters of this study's **respondents cite a digital twin of operations to evaluate disruptive events and minimize the hit they deliver to the bottom line as their number one priority**. The fact that only slightly more than half say they've achieved this task is somewhat worrisome should another season of disruption be at their door.

However, it is the second data point in Figure 19 which give far greater cause for concern: just more than a third of retailers say their supply chains are currently in a state where they can monitor – and react – to supply chain events and react accordingly. What this tells us is hard to ignore, and helps to summarize the full findings of this report:

1. At the beginning of 2025, retailers had extensive plans to address the weaknesses in their supply chains that had been exposed by the COVID-19 pandemic and its lingering after-shocks.
2. The vast majority (particularly the best performers, Retail Winners) were looking to emerge from their duck-and-cover stance to address these issues in a truly transformational way.
3. The current chaos of on-again/off-again global trade war (or some version of it) may well have reanimated their survival-mode instincts enough to return to wait-and-see mode. Time will tell.
4. However, in the event that a global trade disruption does occur, many will not be prepared to weather it. They simply haven't had a long enough duration of consistent growth to have made significant investments in the supply-chain focused technologies that they covet most - chief of which are AI-enabled forecasting and planning tools.

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 Chaos

One of the most significant findings of this research is that – had 2025 been a normal year – retailers were poised to invest heavily into their supply chain systems.

However, 2025 has proven to be anything **but** normal, as an environment of wildly fluctuating tariffs has completely upended the relative stability retailers – and their supply partners – were expecting. The hard truth is that our industry is now trying to plan – what to buy, what to sell, how much demand there will be, how much supply will be needed - in an environment when planning is nearly impossible. Acknowledging this chaos is now the first step on the journey, as all indicators point to this being the “new normal” for the foreseeable future.

Get On With It

Because chaos appears to be the new normal for retailers and their suppliers, the next best step forward is to get on with it. *The plan may be out the window, but that doesn't mean a new plan shouldn't take its place*. We advise retailers to use the data available and new analytics to *sense and respond* to changes in market conditions as quickly as they possibly can. Just as it was during the pandemic, this is a time not to get creative. Retailers have shown – time and again – that when backed into a corner, they are more than capable of adapting.

Trust In The Predictive And Exception-handling Technologies You've Purchased

Due to the nature of this research being conducted every year, we know that one of the areas where retailers have invested most heavily since the pandemic has been in technologies that help them better respond to supply chain shocks. However, these are newer investments, and while our respondents in this research clearly see great *value* in AI's role in one day helping them make smarter decisions in near-real time, the fact is only 40% of retailers have implemented such tools with high enough satisfaction to fully trust them. It is time to push the go-faster button here. Finance, health care, even emergency response services like fire and rescue – all are taking the leap in trusting the data spit out by their predictive and scenario-planning tools. This is the time for retailers to trust theirs, as well. Trust, but verify, is clearly the way forward here.

Share The Burden/Share The Reward

We've mentioned several times throughout this report that many retailers were able to adapt quickly in the face of genuine adversity during the global COVID-19 crisis. In that scenario it turns out that much of that adaptability was attributable to a willingness to collaborate both inside the enterprise and with trading partners. Individuals and departments that had previously worked either independently – or with open disdain for one another – came together for the common good. This situation will require the same – if not more so – collaboration.

Retailers and their supply partners need to get more collaborative in this chaotic environment than they have before. We are already hearing many stories of “splitting the difference” in tariff-related upcharges between buyer and seller – all in hopes of not forcing a price point that scares the end-consumer away.

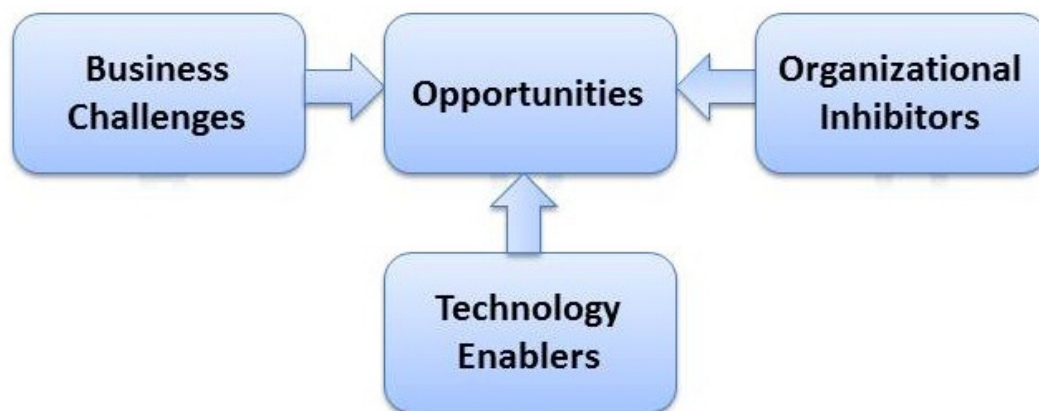
As always, technology can help. However, when the dust settles on these times, the stories we might all be sharing most will be those of how creative retailers and suppliers became in recognition that this is not a supply chain – it's a network that only functions effectively when all parties involved are pushing in unison towards a common goal.

Appendix A: The BOOT Methodology[®]

The BOOT Methodology[®] is designed to reveal and prioritize the following:

- **Business 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.
- **Opportunities** – 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.
- **Organizational 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.
- **Technology 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 Sponsor



enVista is the leading supply chain and enterprise consulting firm and the premier provider of supply chain technology & strategy services, material handling automation & robotics, Microsoft solutions and IT managed services. With 20+ years of unmatched domain expertise, enVista serves thousands of leading brands. enVista's unique ability to consult, implement and operate across supply chain, IT and enterprise technology solutions allows companies to leverage enVista as a trusted advisor across their enterprises. www.envistacorp.com

Appendix C: About Our Partner



The Global Consumer Commerce Centre

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 D: 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.

Copyright © by Retail Systems Research LLC • All rights reserved.

No part of the contents of this document may be reproduced or transmitted in any form or by any means without the permission of the publisher. Contact research@rsrresearch.com