

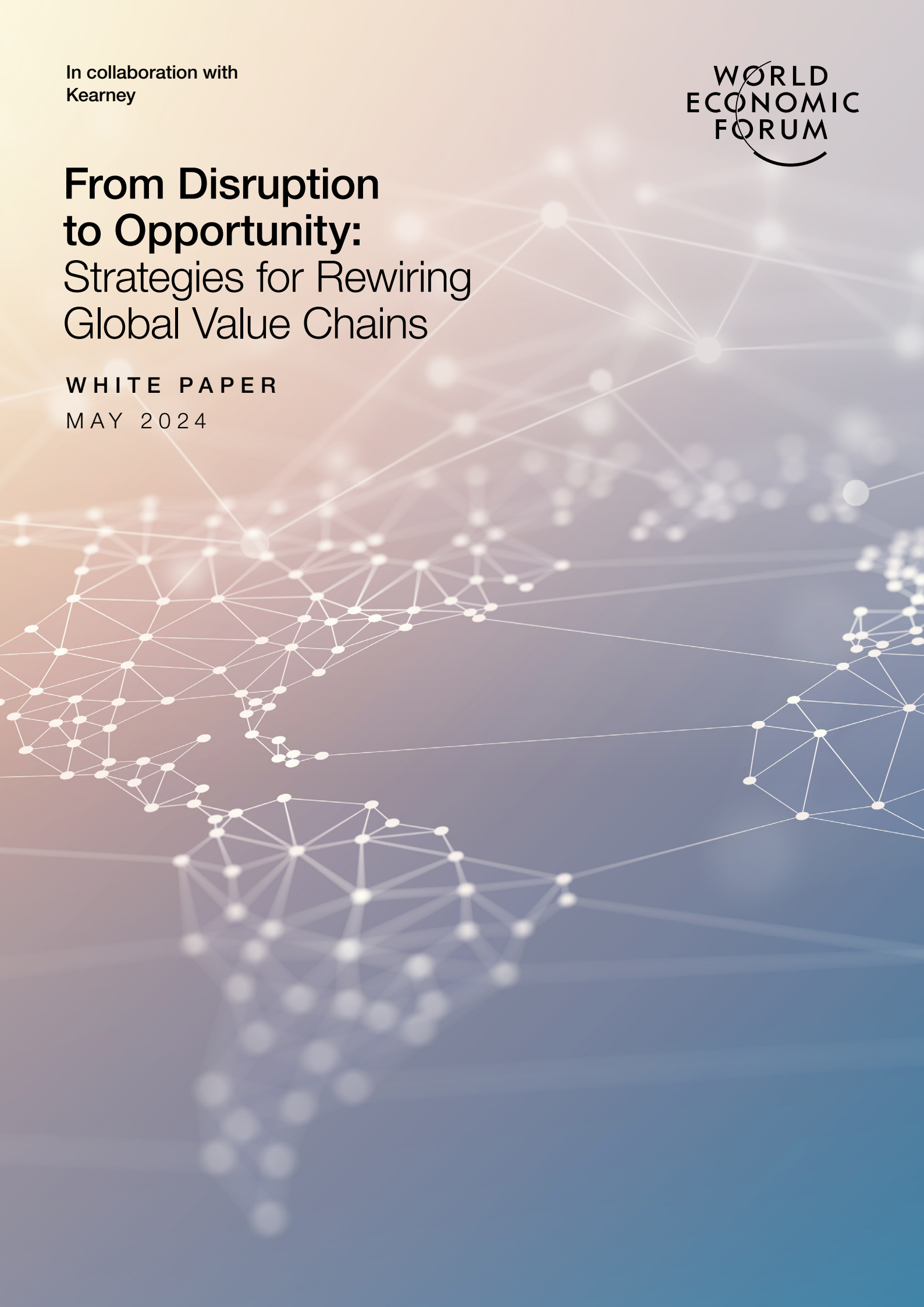
In collaboration with  
Kearney



# From Disruption to Opportunity: Strategies for Rewiring Global Value Chains

WHITE PAPER

MAY 2024



# Contents

Foreword	3
Executive summary	4
1 Disruption as a constant	5
2 Rhetoric vs. reality: The gap between strategic intent and operational delivery	7
3 Foundational and groundbreaking strategies for value chain rewiring	14
Conclusion	21
Contributors	22
Acknowledgements	23
Endnotes	25

## Disclaimer

This document is published by the World Economic Forum as a contribution to a project, insight area or interaction. The findings, interpretations and conclusions expressed herein are a result of a collaborative process facilitated and endorsed by the World Economic Forum but whose results do not necessarily represent the views of the World Economic Forum, nor the entirety of its Members, Partners or other stakeholders.

© 2024 World Economic Forum. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, including photocopying and recording, or by any information storage and retrieval system.

# Foreword



**Per Hong,**  
Senior Partner, Strategic  
Operations, Kearney



**Kiva Allgood,**  
Head, Centre for Advanced  
Manufacturing and Supply  
Chains, World Economic Forum

The temptation to roll back on the complexity and scale of global value chains may be an alluring one. However, the inescapable reality is that value chains are constantly susceptible to societal, environmental and geopolitical upheavals. Manufacturers therefore need to carefully consider how their value chains can thrive, while also recognizing the extent to which their decisions can add value in the context of an ecosystem that is both delicately balanced and susceptible to external disruption.

Rather than stripping away complexity from their value chains, manufacturers can leverage the scale and interconnectedness of their networks by embracing new, holistic and data-driven methods to increase efficiency, while simultaneously driving sustainability, resilience and agility.

Meeting these goals requires going beyond seeking resolution through short-term fixes and has triggered a fundamental rewiring of value chains over the long term. A continued commitment to bridge the gap between strategic ambition

and operational delivery is needed to help meet customer expectations, ensure long-term retention and growth, and confront trade-offs around cost, performance, resilience and sustainability.

As global disruptions grow in intensity and frequency, it is imperative to continue to redesign and fortify value chains through foundational and groundbreaking strategies. By adopting a multistakeholder approach to rewiring, it is possible to navigate market turbulence and manage trade-offs while building in competitiveness for future value chains. In this white paper, the World Economic Forum, in collaboration with Kearney, presents a playbook of proven strategies deployed along each of the five trends shaping the rewiring of global value chains, developed in partnership with a community of manufacturing and supply chain executives and experts. We trust this will help guide decision-making among the global industrial community to ensure value chains of the future are reshaped in a way that has a positive economic, societal and environmental impact.

# Executive summary

A holistic approach to rewiring from “leading” manufacturers is strengthening value chains in the face of continued disruption. The post-pandemic landscape for global value chains remains fraught with challenges complicated by internal and external headwinds. As global disruptions from climate change, geopolitics and emerging technology continue to increase in intensity and frequency, the safeguarding of global value chains is top-of-the-mind from factory floors to executive boardrooms.

This paper builds on the five trends that continue to dominate the rewiring of global value chains outlined in the report, “A Global Rewiring: Redefining Global Value Chains for the Future”.<sup>1</sup> As the report notes, manufacturers are shifting from:

- Global to globally-connected, multi-local value chains;
- “Doing” digital to “being” digital across end-to-end operations;
- Economies of scale to economies of skill;
- Regulatory compliance to innovative sustainability;
- Being cost-driven to being customer value-driven.

In light of this, the World Economic Forum, in collaboration with Kearney, carried out a survey of over 300 global operations executives, followed by more than 30 consultations, to understand what actions manufacturing and supply chain actors are taking to redesign their value chains.

The survey results indicate a gap between strategic intent and operational delivery, largely due to the scale and complexity of the necessary changes, along with opportunity costs, in the form of time, energy and resources. These factors,

together with cascading geopolitical, climatic and technological challenges, underscore the extent to which a response based on incremental change will fall short of what is needed to remain competitive in the coming years.

To continue bridging the gap between intent and operational delivery, manufacturers must stay abreast of the dynamics that shape value chain configuration and be proactive in pursuing wholesale approaches to rewiring. A holistic approach of this kind imbues value chains with the strength and flexibility required to navigate future market turbulence and manage the trade-offs between cost, performance, resilience and sustainability.

Leading manufacturers have made significant progress to deliver on this need, navigating the various complexities confronting them in ways that are foundational for building the prosperity of future value chains, as well as pushing the envelope via groundbreaking strategies. The set of foundational and groundbreaking strategies in this paper represents a playbook of proven best practices for fortifying value chains and offers valuable guidance for organizations across the industrial ecosystem.

The scale of transformation needed to meet these evolving demands calls for a step-change in collaboration between the private and public sectors and across value chains. Going ahead, the World Economic Forum will continue to provide a neutral space and network for manufacturers from industry, the public sector, civil society and academia to successfully navigate the rewiring of global value chains. This will enable best practices and knowledge exchange to flourish, underpinning the creation of value chains capable of delivering positive economic, societal and environmental impact.

1

# Disruption as a constant

Manufacturers face several threats, from technological change to geopolitical instability. How they respond will shape how successfully they navigate value chain risk.

Three global megatrends are creating increasingly frequent disruptions, which are in turn reshaping global value chains and transforming manufacturing systems. These megatrends are emerging technologies, climate change and geopolitical tensions. Their fallouts – ranging from economic uncertainty and changes in governance to environmental degradation and technological step-changes – are becoming ever more common, placing a strain on value chains.

Climate-related disruptions are becoming more frequent and numerous, and are expected to intensify as global temperatures breach the 1.5-degrees Celsius limit outlined by the Intergovernmental Panel on Climate Change (IPCC).<sup>2</sup> Recent occurrences, including droughts affecting water levels in the Panama Canal<sup>3</sup> and widespread flooding in the European Union,<sup>4</sup> have hindered global trade routes, disrupted supply and underscored the urgent need for resilience measures within value chains.

Geopolitical tensions are also on the rise, with the Russian invasion of Ukraine becoming a protracted conflict. Ongoing hostilities in the Middle East, and economic tensions between the United States (US) and China, pose additional risks.

On the technological front, opportunities and threats coexist. Advancements in automation, artificial intelligence (AI) and blockchain present opportunities to enhance efficiency, agility and sustainability. These technologies streamline operations, reduce costs and improve traceability. However, their adoption can also bring challenges in the form of cyberattacks, ransomware and phishing attacks. Increased instances of data breaches and fraud are further complicating the operating environment.

How organizations respond to these concurrent threats is critical to the health of their value chains, both now and in the future. Some organizations are meeting these challenges through a wholesale value chain restructuring rooted in sustainable business practices. For instance, adaptation of regenerative principles and practices can reduce dwell times and empower organizations to take an active role in transforming their operations. These same principles also generate value through supply chain optimization, enhanced agility and improved sustainability compliance.

However, the scale of resources and the commitment needed to successfully execute this kind of transformation is not always viable. While many manufacturers are seeking to optimize operations using a more incremental approach in the face of structural constraints, continuous adaptation to disruption through gradual iteration places value chains at considerable risk.

Overall, manufacturers have made progress on several fronts related to the future-proofing of their value chains, recognizing that designing value chains fit for the future cannot be considered an afterthought, but is a primary objective in the face of external pressures and supply-constrained conditions.

Organizations that choose a proactive approach to value chain rewiring are best suited to creating a network capable of overcoming the volatility associated with the ongoing transformation of value chains. As the World Economic Forum white paper, “A Global Rewiring: Redefining Global Value Chains for the Future”, outlines, manufacturers are shifting from:

- Global to globally-connected, multi-local value chains;
- “Doing” digital to “being” digital across end-to-end operations;
- Economies of scale to economies of skill;
- Regulatory compliance to innovative sustainability;
- Being cost-driven to being customer value-driven.

Actions across these five trends enable organizations to bolster their value chains with the strength and flexibility required to withstand future market turbulence and manage the trade-offs between cost, performance, resilience and sustainability. But action on these fronts does not only insulate value chains from risk; it also strengthens them and gives decision-makers the power to seize opportunities that come their way.

In response to the evolving landscape of global value chains and the pressing need for insights into how businesses are rewiring, the World Economic Forum, in collaboration with Kearney, carried out a survey of over 300 global operations executives, together with more than 30 consultations between October and November 2023, to understand the latest approaches and most effective strategies for redesigning and preparing for the value chains of the future.

This white paper sheds light on manufacturers' progress and actions taken to redesign their value chains in line with these five key trends, and highlights a set of foundational and groundbreaking strategies that manufacturers are using to overcome present and future value chain disruption.



2

# Rhetoric vs. reality: The gap between strategic intent and operational delivery

Manufacturers are deploying leading strategies to bridge the gap between strategic intent and operational delivery towards value chain rewiring.

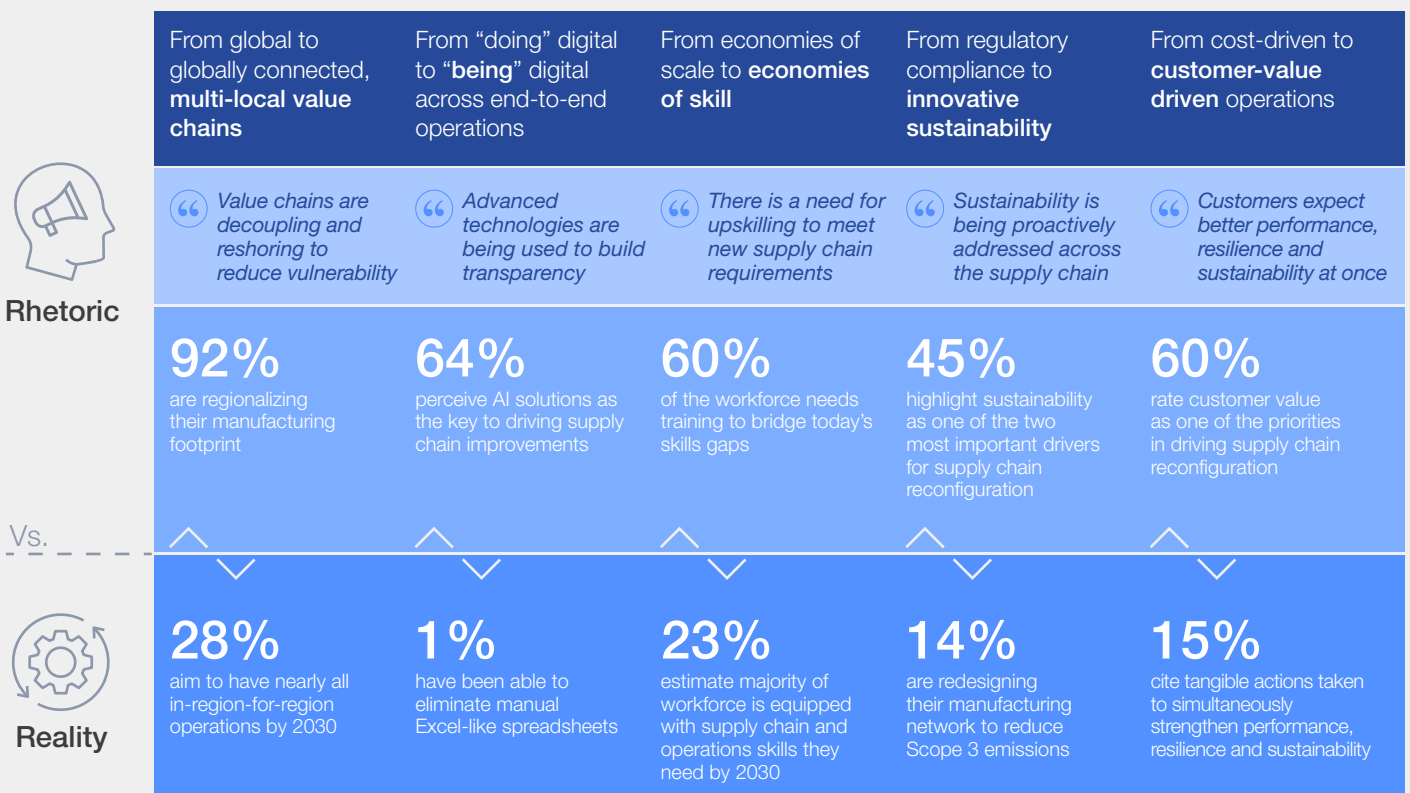
Findings from the survey and consultations conducted highlight that despite considerable progress towards global value chains rewiring, a gap exists between strategic intent and operational delivery. Closing that gap is an extensive process that requires resources, patience, flexibility and agility.

Thus far, a range of factors have hindered progress – internally, these factors pertain to the scale and complexity of value chains and resource availability, and externally, the factors cover the breadth of macroeconomic, political, social and ecological disruptions.

Mapped against the five key trends that are shaping the rewiring of global value chains, the scale of the gap between ambition and reality varies, with manufacturers prioritizing and advancing in different areas related to operations, digital capability, skills, sustainability and the adoption of customer-centric measures.

The remainder of this chapter breaks down the five key trends dominating the rewiring of global value chains to present the survey results and actions taken – by “leaders” (characterized by high annual growth in market share and profit margins between 2020 and 2023, as well as by advanced progress in this journey) and “nascent” manufacturers (characterized by stagnant or declining market share).

FIGURE 1 Rhetoric vs. reality across the five trends shaping the next generation of value chains



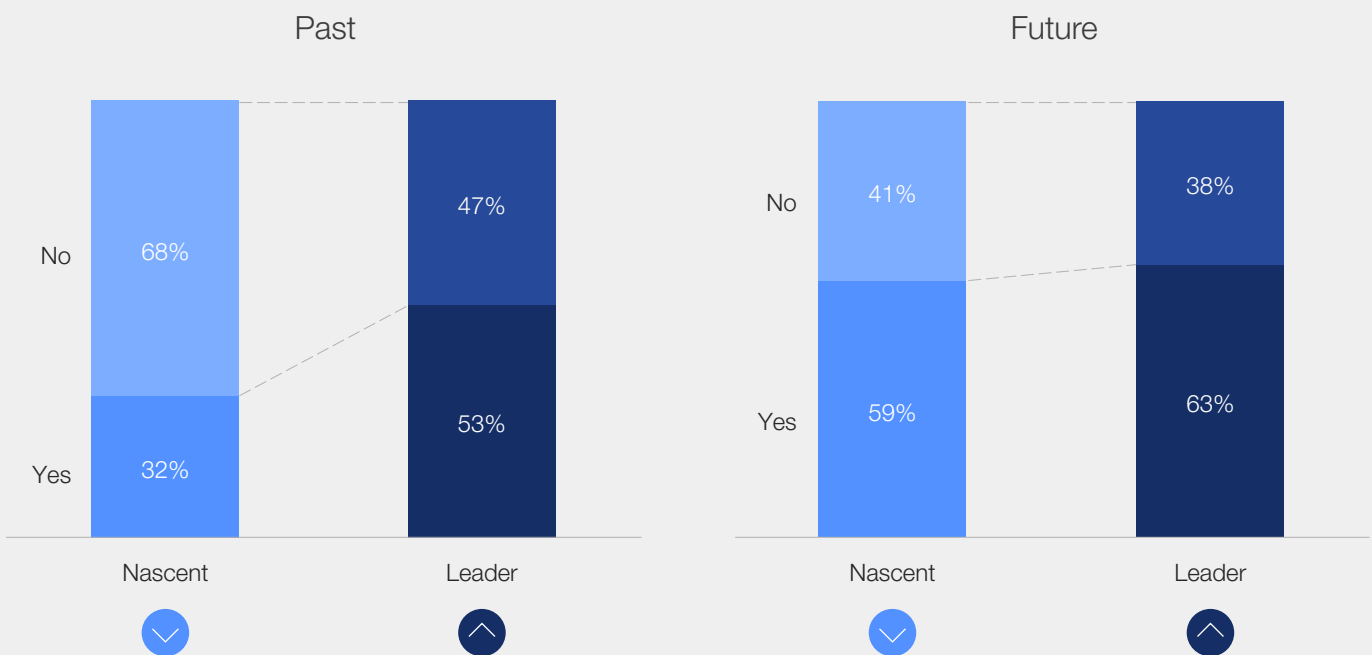
Source: World Economic Forum and Kearney global value chain disruption survey of senior executives, November-December 2023.

## 2.1 From global to globally-connected, multi-local value chains

Geographical compositions of value chains are subject to multiple complexities, with organizations having to balance gains from regionally conjoined networks against those from value chains with a global orientation. Based on the consultations for this paper, the emerging path forward is one in which the value chain is globally-connected yet multi-local in its composition. However, navigating between supply assurance and cost in a margin-intensive setting can be challenging.

Indeed, while 92% of survey respondents say they are prioritizing regionalization, just over a quarter are actually planning for region-for-region operations by 2030 (Figure 1). In addition, 63% of “leaders” plan to have a majority of their direct spend qualified from a second source in a second region (Figure 2). This suggests that “leaders” recognize the need for striking a balance between local and global supply, thereby gaining greater control over external factors while still taking advantage of low manufacturing costs.

FIGURE 2 Is a majority<sup>1</sup> of direct spend qualified from a second source from a second region?



Note: 1. Majority implies more than 50% of direct spend.

Source: World Economic Forum and Kearney global value chain disruption survey of senior executives, November-December 2023.

“Leaders” have selectively re-shored the research and development aspect of their innovation strategy, intellectual property and complex value chain elements, while preserving the benefits afforded by lower-cost manufacturing regions. Planning for regional operations and qualifying alternative suppliers in a different geography helps minimize risk. However, overly focusing on localization may jeopardize the advantages of

globalization, such as cost reduction, availability of raw materials and access to talent.

Optimizing synergies between global and local supply is essential for enhancing competitiveness and efficiency. Strategically planning and prioritizing to find a unified equilibrium will be pivotal for fostering future resilience and growth.



**Cost continues to play a pivotal role in shaping supply chain strategies, with the impact of localization costs frequently overlooked. While there has been an increase in localized manufacturing within Europe and the US, a considerable portion of it is reverting to previous practices.**

Konrad Bauer, Senior Vice-President, Global Business Services, Thermo Fisher

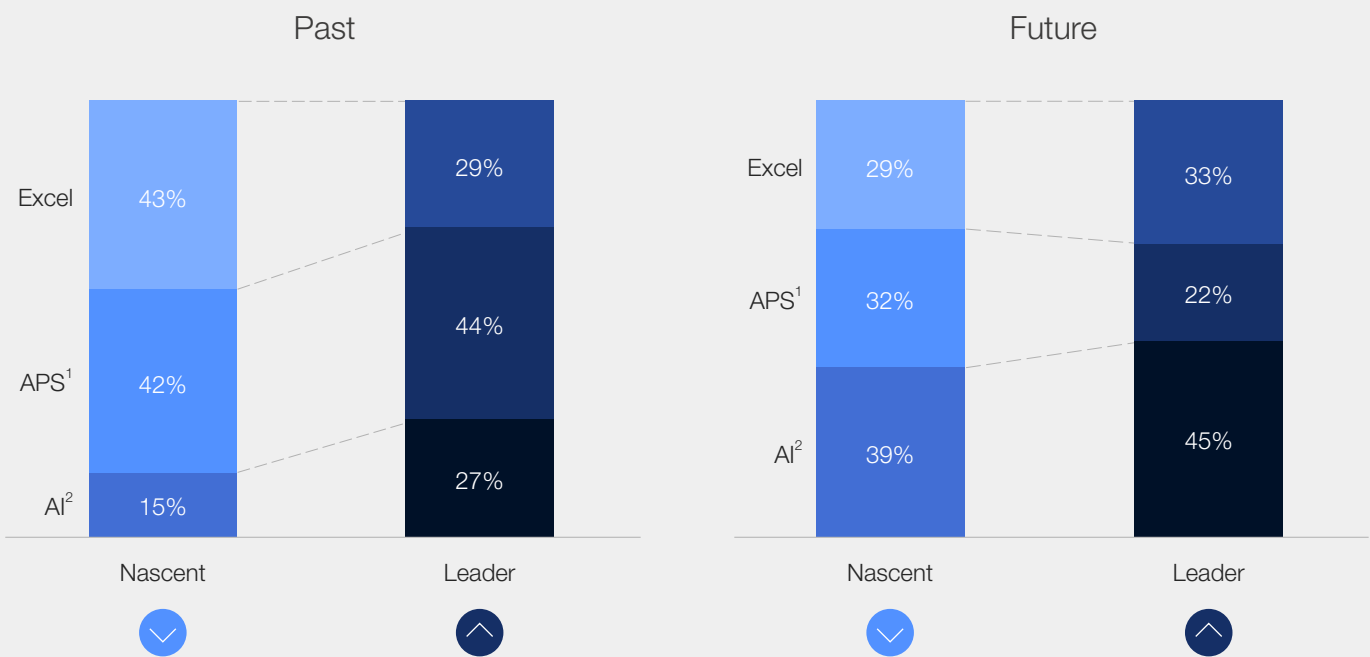


## 2.2 From “doing” digital to “being” digital across end-to-end operations

Nearly two-thirds (64%) of survey respondents perceive AI as the key to supply chain improvements, in the form of lower costs and increased resilience. However, only 1% indicate that they have been able to fully automate processes, whether through partial robotic automation or full AI implementation (Figure 1), suggesting that the scale

and complexity of legacy systems, combined with cultural obstacles to change, remain key barriers to adoption. Nearly half of “leaders” claim they leverage advanced planning systems (APS) for their demand forecasting, while around one-third have introduced AI either as a standalone capability or in conjunction with APS (Figure 3).

FIGURE 3 What core technology is used for demand forecasting?



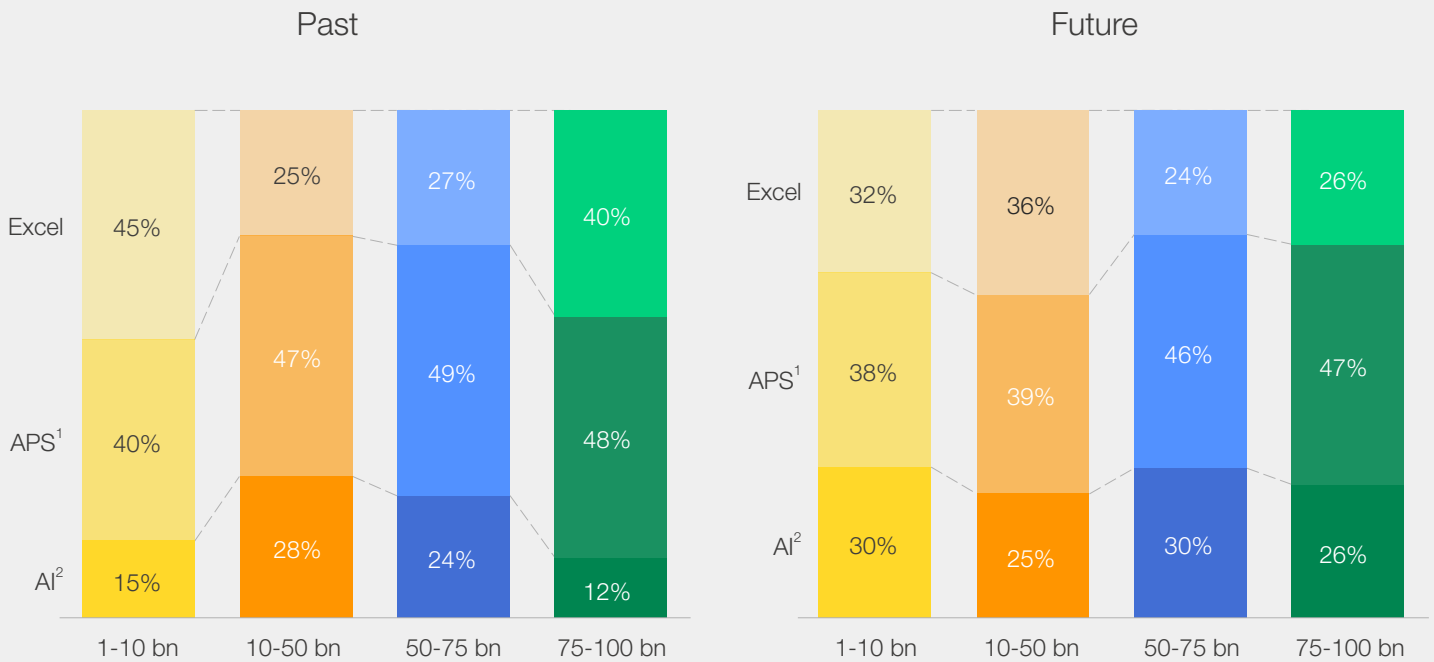
**Note:** 1. Advanced planning systems; 2. Artificial intelligence.

**Source:** World Economic Forum and Kearney global value chain disruption survey of senior executives, November-December 2023.23.

Challenges associated with digital adoption differ widely according to company size (Figure 4). The more manageable size of smaller companies' planning systems (categorized by revenues between \$1 billion and \$10 billion) means they are better suited for leapfrogging in the adoption of digital technologies. Meanwhile, larger companies (with revenues over

\$75 billion) have to overcome the challenge of winding down legacy systems, compounded by internal obstacles associated with company scale, resources and organizational complexity. Medium-sized companies often find themselves in the middle, hampered by a combination of legacy systems and limited resources.

FIGURE 4 | What core technology is used for demand forecasting (by revenue in \$)



Note: 1. Advanced planning systems; 2. Artificial intelligence.

Source: World Economic Forum and Kearney global value chain disruption survey of senior executives, November-December 2023.

## 2.3 From economies of scale to economies of skill

Respondents cited an extensive shortage of key skills (Figure 1). However, value chain “leaders” are turbocharging their efforts for upskilling, and as a result, are more bullish around future preparedness (72%) than in the past (41%) (Figure 5).

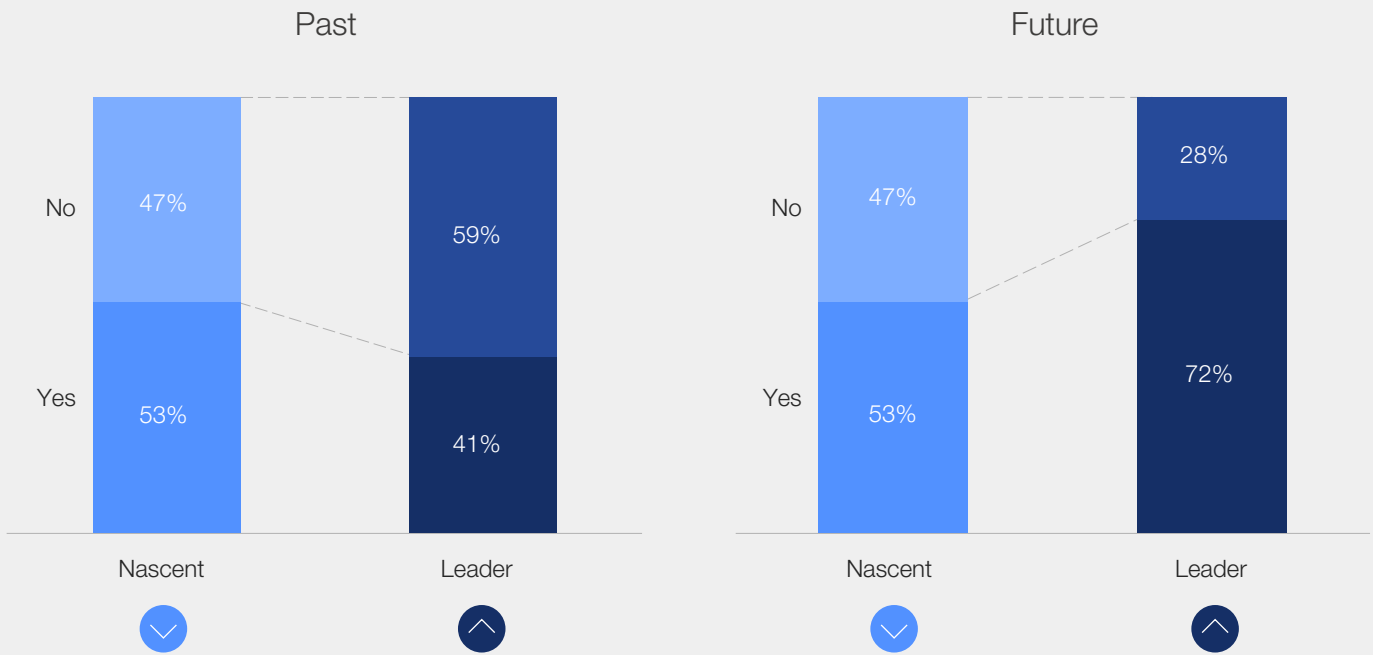
Manufacturers across the value chain recognize that to take advantage of the latest technological advancements requires economies of skill, where the knowledge base of workers tasked with using technology can maximize its potential. The competition for skilled professionals remains a constant challenge across value chains, with many manufacturers continuing to face difficulties due to a scarcity of personnel with the requisite experience and expertise.

With 60% of the global workforce in need of significant training to bridge the skills gap,

this presents a unique opportunity to rethink organization models. Shifting to a ratio in which 80% of the workforce can work across functions, while the remaining 20% focuses on specific capabilities, can drastically increase organizational flexibility and competitiveness.

According to the World Economic Forum’s 2023 “Future of Jobs” report,<sup>5</sup> the top five core skills coveted by organizations include, but are not limited to; analytical thinking, creative thinking, resilience, flexibility and agility, motivation and self-awareness, and curiosity and lifelong learning. Skills that are increasing in importance across organizations follow a similar pattern, with creative thinking, analytical thinking, technological literacy, curiosity and lifelong learning, and resilience, flexibility and agility comprising the top five among those surveyed.

FIGURE 5 | Do a majority<sup>1</sup> of your operations people have the skills to run the supply chains of 2030?



**Note:** 1. Majority implies more than 50% of direct spend.

**Source:** World Economic Forum and Kearney global value chain disruption survey of senior executives, November-December 2023.

The dynamics of supply chain skills are undergoing continuous evolution, as operations are consolidating onto unified platforms and as digitally-enabled decision-making capabilities are enhanced. This marks a significant transformation in the way supply chains operate, with future skill needs

under constant influence from the rapid evolution of technology. Recognizing this, organizations can embrace agility and continuous upskilling to proactively anticipate and develop the necessary skills for tomorrow, transforming challenges into opportunities for growth and innovation.



**In the ever-evolving landscape of today’s and tomorrow’s world, talent stands as a pivotal focus. To effectively navigate the future of global value chains, a paradigm shift is imperative – a new approach to working, utilizing information, and embracing diverse talents and mindsets.**

Jorge Zarate, Global Senior Vice-President, Operations, Grupo Bimbo

## 2.4 From regulatory compliance to innovative sustainability

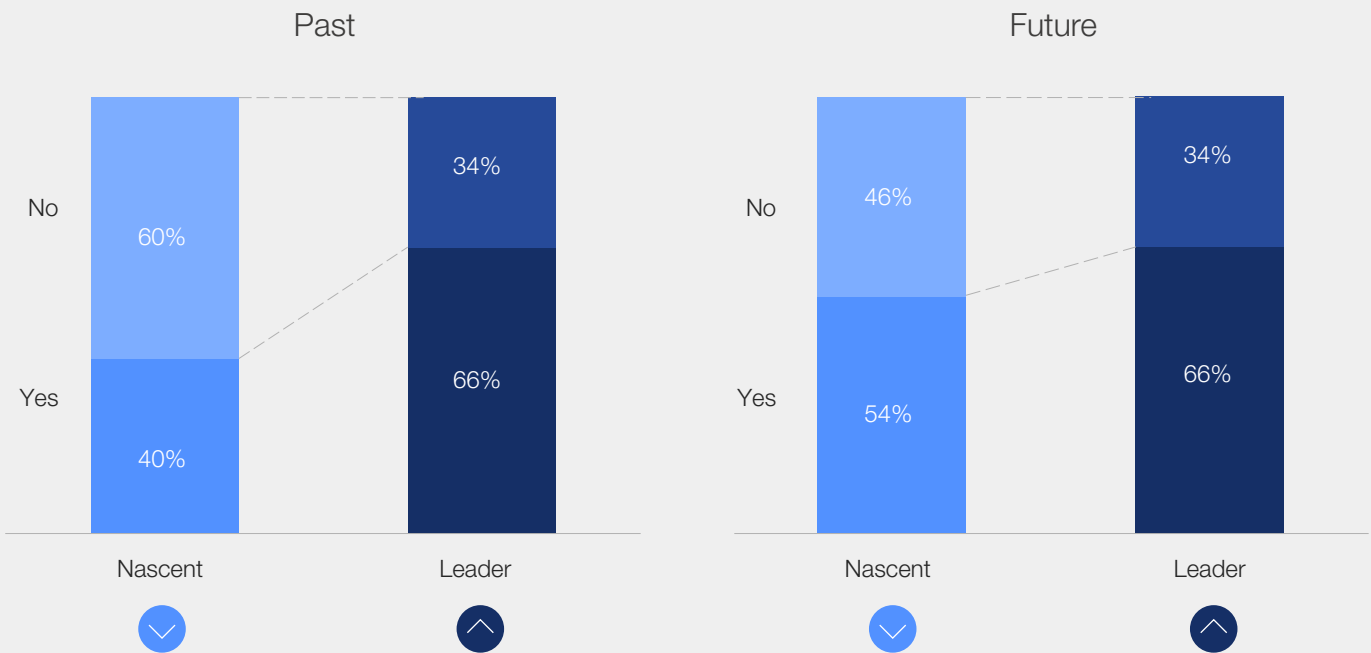
While survey respondents note that sustainability is high on chief executive officers' agendas, with nearly half of respondents highlighting sustainability as the most important factor driving supply-chain transformation, only 14% of respondents are re-designing their manufacturing network to track and eliminate indirect greenhouse gas emissions (Figure 1).

However, in many cases, "leaders" are putting sustainability credentials at the forefront of decision-making when selecting suppliers, with 66% prioritizing sustainability over price (Figure 6). "Leaders" recognize that the problem is not a binary

sustainability versus cost consideration, and future projections from these same "leaders" suggest this commitment to sustainability remains steadfast.

The climate crisis is resulting in a significant increase in the volume and intensity of extreme weather events, putting added pressure on business continuity. Innovating around sustainability in end-to-end operations will not only ensure compliance with fast-changing regulatory requirements, but also help secure a decarbonized and ecologically friendly value chain that is fit for the future.

FIGURE 6 Has your organization selected a supplier that had the best sustainability credentials but not price?



Source: World Economic Forum and Kearney global value chain disruption survey of senior executives, November-December 2023.



**We decided to power our factories using exclusively renewable energy. Initially this was about 10% more expensive than standard energy but as electricity prices spiked it became a substantial saving. This decision not only benefited our finances but also aligned with our commitment to the environment.**

Ian Wood, Chief Supply Chain Officer

## 2.5 From cost-driven to customer value-driven

Over half of “leaders” (53%) recognized the importance of customer value-centric measures in the past, while 70% recognize their importance for the future (Figure 7). Additionally, over 60% of respondents cite the drive to ensure value chains are more resilient and perform better for the customer as a key driver for rewiring. Yet, only 15% of respondents can cite tangible examples of actions that optimize customer expectations, such as performance, resilience and sustainability (Figure 1).

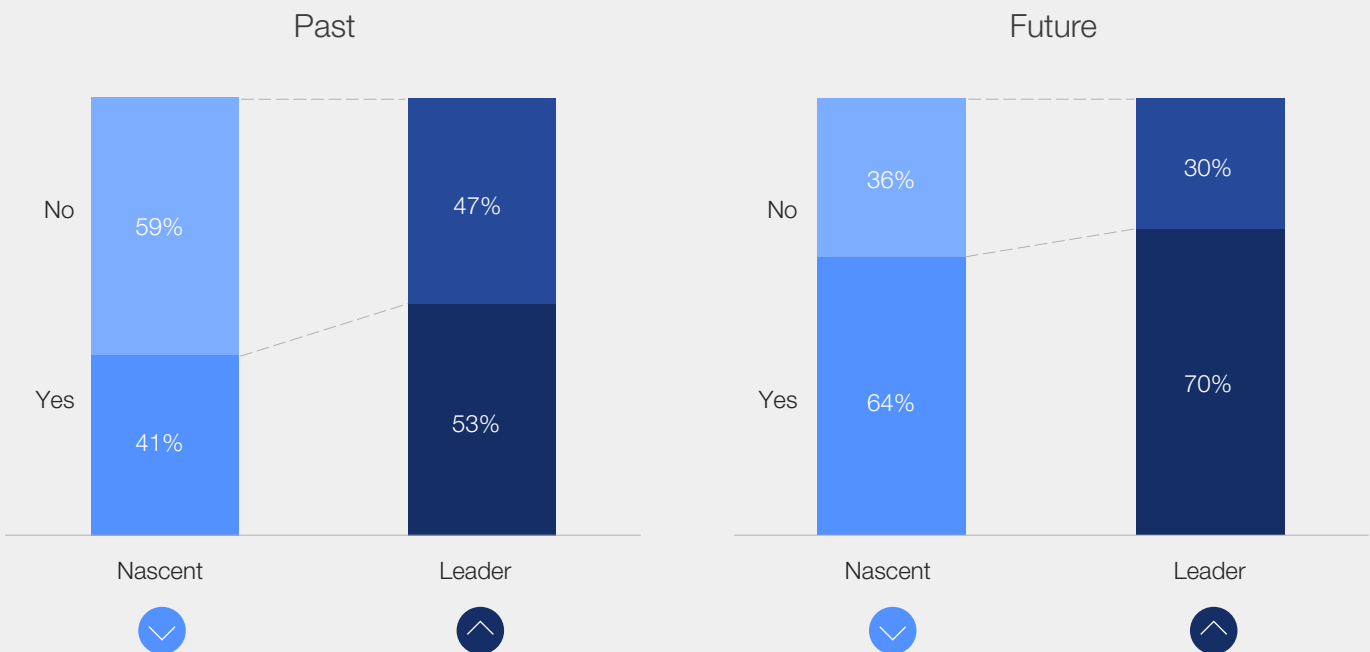
These results suggest that adopting new approaches to decision-making, navigating trade-offs that meet customer expectations and ensuring long-term retention and growth, are taking longer than anticipated. Greater collaboration between customers, suppliers and the public and private sectors can help businesses tackle these fundamental trade-offs and prioritize actions for long-term growth. “Leaders” recognize this, and often collaborate with suppliers on issues such as

product design to incorporate a greater proportion of interchangeable and generic parts.

Customer value, historically prioritized by customer-facing departments such as marketing and sales, has often been overlooked by other teams that are siloed with their own key performance indicators (KPIs). This is especially evident in cases where the proliferation of stock-keeping units (SKU) to meet diverse customer preferences contrasts with a desire for simplification of the product portfolio, or where the objective of meeting continuously changing customer demand brings with it the challenge of meeting varying order quantities, small or large.

Meeting consumer demand in a volatile value-chain environment plays an important role in minimizing the risk of losing market share. Avoiding such a scenario requires a reorientation that prioritizes short lead times and meets consumer demand.

FIGURE 7 Are customer value-centric variables, such as service and flexibility, a focus when making value chain optimization decisions?



Source: World Economic Forum and Kearney global value chain disruption survey of senior executives, November-December 2023.

3

# Foundational and groundbreaking strategies for value chain rewiring

Manufacturers are leveraging the full range of strategies at their disposal to assemble value chains of the future.

How can manufacturers effectively bridge the gap between strategic intent and operational delivery within the evolving landscape of global value chains? This chapter builds upon the findings of the above survey and consultations to compile a playbook of proven strategies deployed to redesign value chains along each of the five trends dominating the ongoing rewiring.

These strategies are broken down into sets of foundational strategies, most of which have already been implemented by “leaders”, and groundbreaking strategies, which have been identified by “leaders” as focus areas for the future. Together, these insights provide guidance for manufacturers looking to navigate myriad value-chain complexities and actualize future efficiencies.



### 3.1 From “global” to “globally connected”, multi-local value chains

“Leaders” that excel in supply-chain network reconfiguration have laid a strong foundation by finding an optimal balance between global and local supply. This entails building a diversified manufacturing network that pre-qualifies suppliers as standby options in different regions to reduce clustering risks. Future

strategies include further refining and enhancing value chain development. This can be achieved with a series of groundbreaking strategies that take advantage of network complexity by ensuring end-to-end stakeholder collaboration to enable flexible nodes and real-time re-routings (Figure 8).

FIGURE 8 From global to globally connected, multi-local value chains: Foundational and groundbreaking strategies identified by “leaders”



Source: World Economic Forum and Kearney global value chain disruption survey of senior executives, November–December 2023.



Embracing the reality that you can’t do everything yourself is crucial, necessitating a re-evaluation of your business models and their integration with the supply chain. This realization brings to the forefront the meticulous yet essential task of partner selection, ensuring that all parts of the chain work in harmony. The global supply chain, with its diverse constituents, must operate seamlessly, despite the understanding that perfection is unattainable. Therefore, it’s imperative to design the supply chain with flexibility, allowing for adjustments when things inevitably deviate from plan.

Mohammad Choucair, Chief Executive Officer, Archer Materials

## 3.2 From “doing” digital to “being” digital across end-to-end operations

“Leaders” that excel in transforming their organization into a digital-first operation have laid a strong foundation by revamping legacy systems, transforming their clients’ digital landscape and investing in technology for near real-time visibility. Future strategies include combining advanced

analytics, big data and GenAI to optimize value chains end to end, modelling scenarios by integrating AI decision-making capabilities with digital twins of supply chains and facilitating decision-making through real-time enterprise resource planning (ERP) (Figure 9).

FIGURE 9 From “doing” digital to “being” digital across end-to-end operations: Foundational and groundbreaking strategies identified by “leaders”



Note: \*Radio frequency identification.

Source: World Economic Forum and Kearney global value chain disruption survey of senior executives, November-December 2023.



**In an unbelievably complex world, companies must not only equip leaders with the necessary tools for optimal decision-making but also commit to digital transformation as a cornerstone of their strategy. This transformation requires an upfront investment but promises massive value, as evidenced by the success of digitally connected companies during the pandemic.**

Kathy Wengel, Executive Vice-President; Chief Technical Operations and Risk Officer, Johnson & Johnson

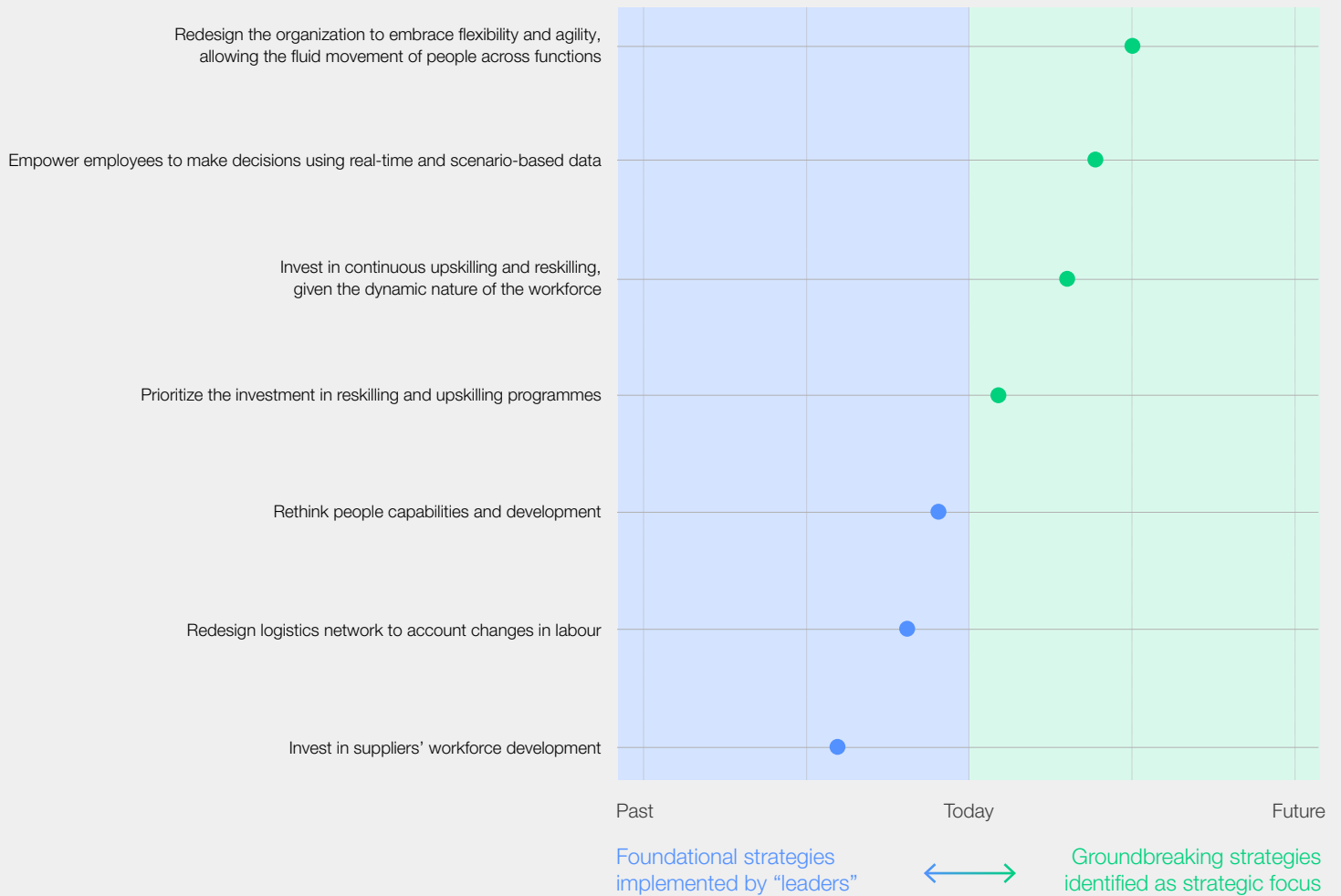


### 3.3 From economies of scale to economies of skill

“Leaders” that excel in transforming the skills base of their organization have laid a strong foundation by rethinking employee capabilities and development, and investing in reskilling and upskilling programmes. Future strategies include moving away from

top-down directives and instead empowering organizations to make decisions using real-time and scenario-based data, while maintaining a focus on continuous development to reflect the dynamic nature of the skills gap (Figure 10).

FIGURE 10 From economies of scale to economies of skill: Foundational and groundbreaking strategies identified by “leaders”



Source: World Economic Forum and Kearney global value chain disruption survey of senior executives, November-December 2023.



**The speed you adopt and implement technology, coupled with how quickly you can upskill your people, can be the defining factor between a successful and unsuccessful supply chain.**

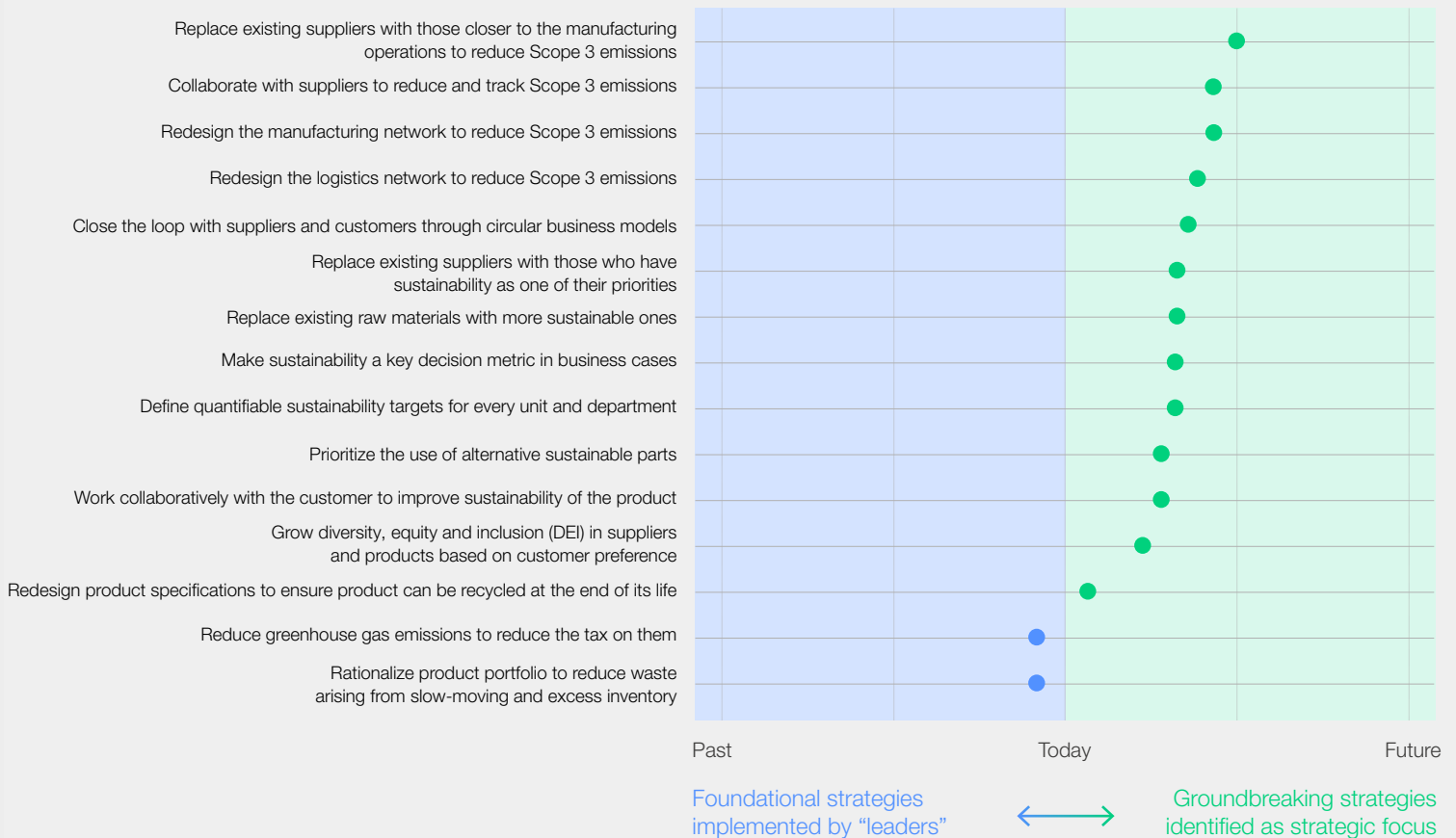
Mourad Tamoud, Executive Vice-President, Global Supply Chain Operations, Schneider Electric

### 3.4 From regulatory compliance to innovative sustainability

“Leaders” that excel in transforming their approach to sustainability have laid a strong foundation by building a fully measurable zero-carbon supply chain (including Scope 1, 2 and 3 emissions considerations), whose benefits are experienced

by customers and certified by stakeholders. Future strategies include operationalizing measures to meet sustainability targets across the value chain in a more meaningful way and reconciling profitable growth with sustainability (Figure 11).

FIGURE 11 From regulatory compliance to innovative sustainability: Foundational and groundbreaking strategies identified by “leaders”



Source: World Economic Forum and Kearney global value chain disruption survey of senior executives, November-December 2023.



**In times of challenge, super ambitious strategies require a dual-speed approach, acknowledging the importance of quick successes and the agility to course-correct. It’s crucial to prioritize, recognizing that not every goal can hold equal importance at all times. This balanced drive at varying speeds underscores the essence of navigating through challenging times with foresight and flexibility.**

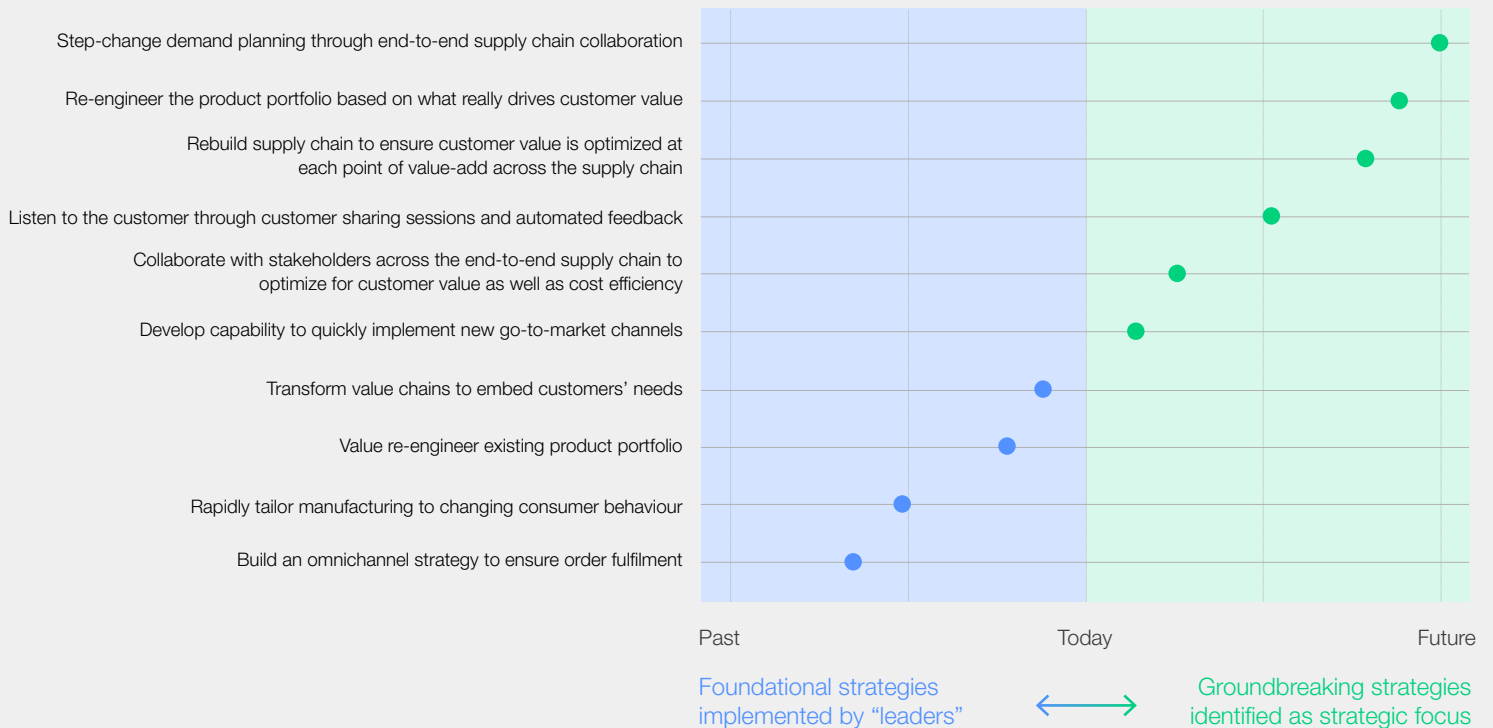
Magne Setnes, Chief Supply Chain Officer, Heineken

### 3.5 From cost-driven to customer-value-driven value chains

“Leaders” that excel in transforming their approach to customer value have laid a strong foundation by embedding customers’ needs and optimizing for customer value and cost efficiency. Future strategies include fostering a step-change in demand planning through end-to-end supply-chain

collaboration. This allows manufacturers to adapt quickly to changing consumer trends, ensure best-in-class product availability and rebuild the supply chain to ensure customer value is optimized at each value-add stage in the process (Figure 12).

FIGURE 12 From cost-driven to customer-value-driven: Foundational and groundbreaking strategies identified by “leaders”



Source: World Economic Forum and Kearney global value chain disruption survey of senior executives, November-December 2023.



We are interviewing and discussing with suppliers on digital tools, changing the footprint of manufacturing and distribution. It’s necessary for our supply chain. Managing this amount of change while educating and bringing with us the workforce and maintaining success from a cost structure, can be a lot, but the reward is high as we pull it off.”

Ernest Nicolas, Chief Supply Chain Officer, HP

## How a leading consumer packaged goods company is unlocking value through end-to-end supply chain collaboration

In the dynamic landscape of global manufacturing, companies are constantly seeking innovative strategies to strengthen their value chains for the future. A leading consumer packaged goods (CPG) company stands out as a prime example of embracing and operationalizing the five trends driving the rewiring of value chains, resulting in improved efficiency and resilience.

At the heart of this company's transformative journey lies a recognition that value chain volatility is an enduring trend that requires proactive end-to-end collaboration with stakeholders outside the organization's traditional operating boundaries.

A striking illustration of the company's collaborative prowess lies in its strategic partnership with major retailers. By leveraging real-time data exchange agreements with several of its partners, the company has unlocked insights into consumer behaviours and market trends. Unlike the conventional industry standard of 90% on-shelf availability, the company has achieved an astounding 95-98% availability rate where these partnerships have been established, a testament to the efficacy of its data-driven approach.

A collaborative approach has also enabled it to utilize the potential of digital innovation, harnessing data partnerships and investments in digital infrastructure for better demand

forecasts. When combined with its desire to negotiate mutually beneficial trade terms with suppliers, these digital capabilities have allowed the company to establish a unified framework for aligning goals across the supply chain.

Collaboration does not just mean working with external partners. It also means recognizing the importance of people and skills in driving organizational change. By supporting internal collaboration and redefining roles to empower customer-focused teams, this company has not only expanded its influence beyond its four walls, but has also reaffirmed its commitment to delivering superior customer value – a core tenet of the rewiring agenda. Customer value represents a guiding principle for the company's transformation journey – it has shifted from being a “defensive” capability to being an “offensive” one, making it an important source of value creation for the company.

Most importantly, this company has spearheaded this change without losing sight of its commitment to sustainability. By fine-tuning production processes to align with accurate demand forecasts, it has managed to minimize inventory and reduce excess waste, underscoring its dedication to fostering a more sustainable and environmentally conscious value chain.

# Conclusion

Deeper engagement between the public and private sectors will enable value chains of the future to flourish.

In the face of an uncertain and supply-constrained operating paradigm that shows no signs of shifting, organizations realize the need to rewire their value chains for better resilience and value-creation.

“Leaders” continue to demonstrate innovative ways of embracing opportunities related to the five key trends shaping value chain configurations. This underlines their commitment towards value chain transformation, marked by a readiness to adopt and implement innovative new approaches to ensure that the global manufacturing sector thrives well into the future.

That said, companies can afford to commit time, energy and focus to a finite amount of actions, placing an emphasis on prioritizing and sequencing the most viable actions. The journey to bridge the gap between strategic intent and operational redesign of value chains takes time. The implementation curve on value chain optimization is steep, and the journey towards matching ambition with the robust and prosperous outcomes outlined in this paper does not happen overnight. Manufacturing companies need to consciously decide where to invest their time, capital and energy, depending on their organization’s comparative advantage, the sector in which it operates and the practices of its nearest competitors.

Many of the interventions pioneered by industrial companies that are both foundational and groundbreaking are already being implemented at scale by “leaders” across industries. However, the

scale of transformation needed to meet the evolving demands shaped by the five trends affecting value chains calls for a step-change in current levels of collaboration. Engagement across the value chain between the public and private sectors plays a vital role in supporting stronger, and globally and regionally coordinated, development of next-generation industrial policies and strategies.

Moving forward, the World Economic Forum will continue providing a neutral space and network for manufacturers from across industries, public sector, civil society and academia to understand the implications of global value chain rewiring from a private and public sector perspective. The public sector, in particular, will play a key role, as nations across the globe proactively review the industrial policies required to support the actions that “leaders” are taking in response to the five trends rewiring value chains.

The “Future-Proofing Global Value Chains: Country Preparedness and Beyond” initiative driving this white paper will delve into the critical aspects of country-level preparedness for manufacturing and value chains of the future. It is set to culminate in community workshops, partnerships and publications, enhancing the collective knowledge and actions directed at creating future-ready strategies for industrial policy and the value chains they shape to support resilience and growth.

# Contributors

## World Economic Forum

**Kiva Allgood**

Head, Centre for Advanced Manufacturing and Supply Chains; Member of the Executive Committee

**Memia Fendri**

Lead, Content Curation and Operational Excellence, Centre for Advanced Manufacturing and Supply Chains

**Anny Marcus**

Project Fellow, Centre for Advanced Manufacturing and Supply Chains

**Kyle Winters**

Specialist, Initiatives and Community, Centre for Advanced Manufacturing and Supply Chains

## Kearney

**Per Kristian Hong**

Managing Director; Partner, Innovative Global Operations Transformation Leader; World Economic Forum Relationship Leader

**Nigel Pekenc**

Partner, Global Value Chain Transformation

## Production

**Michela Liberale Dorbolò**

Designer, World Economic Forum

**Madhur Singh**

Editor, World Economic Forum

# Acknowledgements

The World Economic Forum and Kearney thank the following individuals for their input and participation in the survey, consultations and community discussions, which contributed to the development of this white paper.

**Tamer Abuaita**

Senior Vice-President, Operations; Chief Supply Chain Officer, Stanley Black & Decker

**Rajesh Achanta**

Vice-President, Supply Chain, Consumer Packaged Goods, Asia (2020 – 2023)

**Dirk Backhaus**

Executive Vice-President, Product Supply; Member of the Board, Crop Science Division, Bayer

**Konrad Bauer**

Senior Vice-President, Global Business Services, Thermo Fisher Scientific

**Paresh Bhakta**

Senior Vice-President, Operations; Chief Integrated Supply Chain Officer, Nouryon

**Martin Brown**

Chief Supply Chain Officer, Knauf

**Antonio Capó**

Managing Director and Partner; Head, Global Portfolio Solutions, EMEA, The Carlyle Group

**Mohammad Choucair**

Chief Executive Officer, Archer Materials

**Valentina Ericson**

Vice-President, Procurement; Head, Packaging, Signify

**Patrick Foelck**

Head, Strategy and Transformation; Head, Insights and Enablement Procurement, Roche

**Mark Irvin**

Chief Supply Chain Officer, Best Buy

**Sebastian Jaeger**

Managing Director, Cinven

**Peter Knauer**

Head, Supply Chain, SKF Group

**Rachel Kutz**

Vice-President, Mass Market Supply Chain and Operational Efficiencies, AT&T

**Bill Ladd**

Vice-President, Supply Chain Engineering, Automation and Innovation, PepsiCo

**Gary Leibowitz**

Chief Strategy and Transformation Officer, Unilever

**Neil McDonald**

Vice-President, Technical and Supply Chain, Greater China and Korea, The Coca-Cola Company

**Ernest Nicolas**

Chief Supply Chain Officer, HP

**Peter Puype**

Global Head, Supply Chain, Biogen

**Magne Setnes**

Chief Supply Chain Officer, Heineken

**Chris Smith**

President, McLane Grocery

**Stefan Smolik**

Chief Procurement Officer, Premium AEROTECH

**Mourad Tamoud**

Chief Supply Chain Officer, Schneider Electric

**Dan Turney**

President; Global Head, Operations, Ofi

**Paul Vega**

Partner, Cinven

**Roeland Vertriest**

Chief Transformation Officer, DuPont

**Holger Weintritt**

Executive Vice-President; Head, Pharmaceuticals Product Supply; Member of the Executive Committee, Bayer

**Kathy Wengel**

Executive Vice-President; Chief Technical Operations and Risk Officer; Member of the Executive Committee, Johnson & Johnson

**John J.R. Wise**

Director, Global Supply Chain and Planning, Infineum

**Ian Wood**

Chief Supply Chain Officer

**Jorge Zarate**

Head, Operations, Grupo Bimbo

In addition, the World Economic Forum and Kearney acknowledge and thank the following individuals for their support throughout the project:

**Alberto Fumo**

Partner; Global Head, Private Equity and Principal Investors Practice, Kearney

**Suketu Gandhi**

Partner; Global Co-Head, Strategic Operations Practice, Kearney

**Benjamin Henkes**

Principal, Kearney

**Marc Lakner**

Partner; Managing Director, Germany, Austria and Switzerland, Kearney

**Steven G. Mehlretter**

Partner; President, Strategic Operations Practice, Kearney

**Erik Peterson**

Partner; Managing Director, Global Business Policy Council, Kearney

**Hemanth Peyyeti**

Partner, Kearney

**Ingo Schröter**

Partner, Kearney

**Michael F. Strohmer**

Partner, Managing Director and Global Co-Head; European Head, Strategic Operations Practice, Kearney



# Endnotes

1. World Economic Forum. (2023). A Global Rewiring: Redefining Global Value Chains for the Future. Retrieved from <https://www.weforum.org/publications/a-global-rewiring-redefining-global-value-chains-for-the-future/>
2. Intergovernmental Panel on Climate Change. (2021). Climate change widespread, rapid, and intensifying. Retrieved from <https://www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/>
3. World Economic Forum. (2023). "Unprecedented challenges": Drought at the Panama Canal disrupts global trade. Retrieved from <https://www.weforum.org/agenda/2023/08/drought-at-the-panama-canal-poses-unprecedented-challenges-to-global-trade/>
4. European Commission. (2023). New analysis indicates European cities and countries with highest expected losses from future flooding. Retrieved from [https://environment.ec.europa.eu/news/new-analysis-indicates-european-cities-and-countries-highest-expected-losses-future-flooding-2023-06-21\\_en](https://environment.ec.europa.eu/news/new-analysis-indicates-european-cities-and-countries-highest-expected-losses-future-flooding-2023-06-21_en)
5. World Economic Forum. (2023). The Future of Jobs Report 2023. Retrieved from <https://www.weforum.org/publications/the-future-of-jobs-report-2023/>



---

COMMITTED TO  
IMPROVING THE STATE  
OF THE WORLD

---

The World Economic Forum, committed to improving the state of the world, is the International Organization for Public-Private Cooperation.

The Forum engages the foremost political, business and other leaders of society to shape global, regional and industry agendas.

---

**World Economic Forum**  
91–93 route de la Capite  
CH-1223 Cologny/Geneva  
Switzerland

Tel.: +41 (0) 22 869 1212  
Fax: +41 (0) 22 786 2744  
contact@weforum.org  
www.weforum.org