



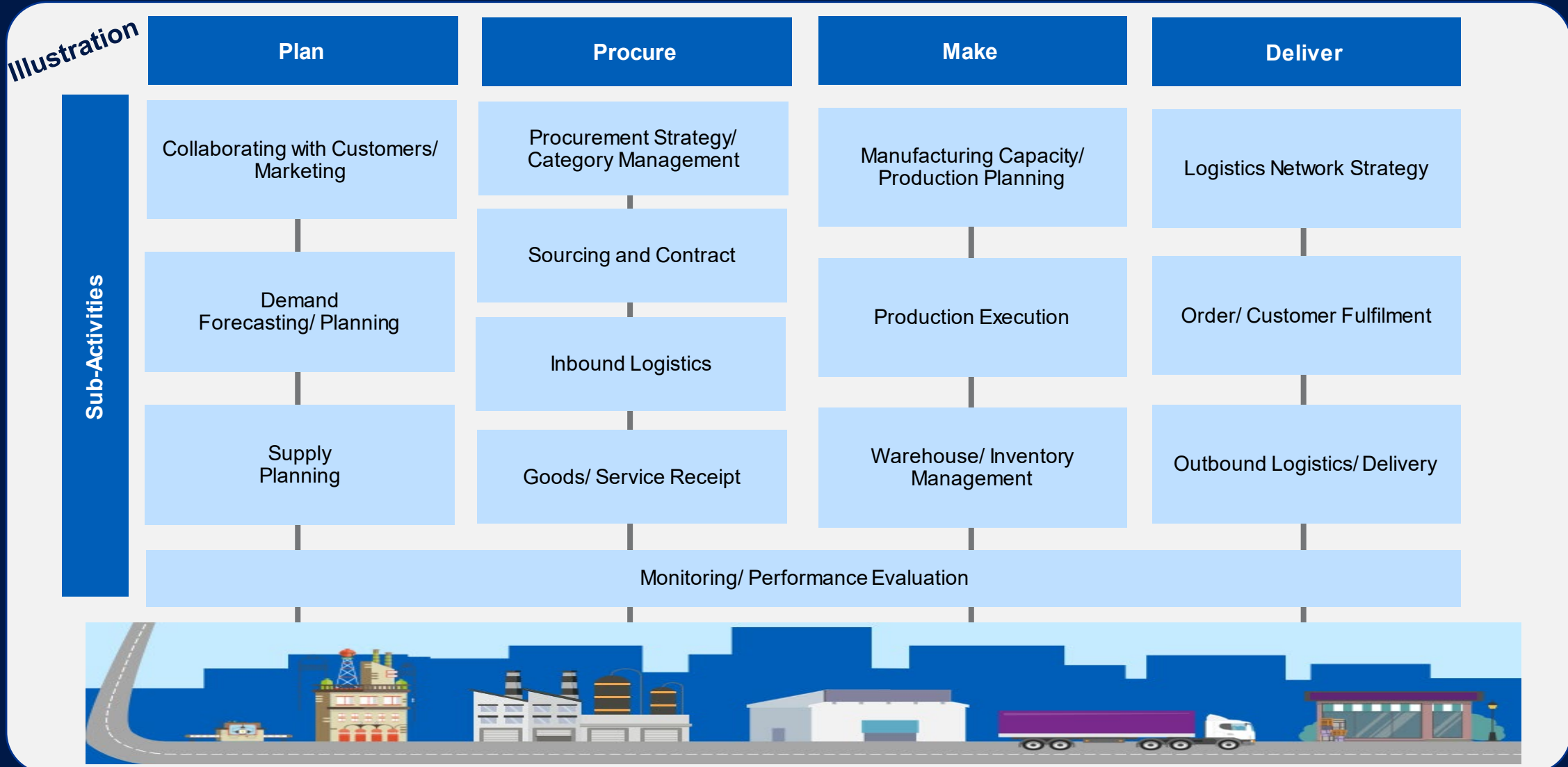
# Future of supply chain

**Audit Committee No. 48**

**10 March 2022**

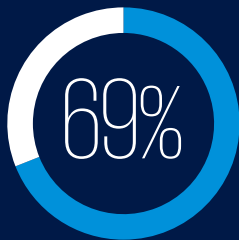


# A supply chain process framework



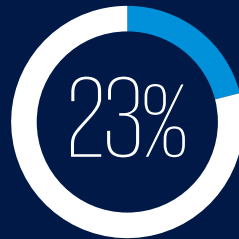
# Trends shaping the supply chain function

## E-commerce shift



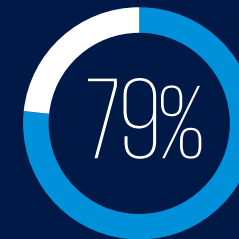
of supply chain organizations expect a decrease in consumer willingness to visit stores over the next 5 years.

## Supply chain digitalization



of supply chain leaders expect to have a digital ecosystem by 2025, up from only 1 percent today.

## New platform model



of supply chain leaders think that an internet-/platform-based approach is the most critical new business model to support post-pandemic recovery.

## Cyber threat



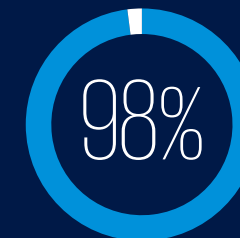
Cyber security risk emerged as the number one risk posing the greatest threat to organizations' growth over the next 3 years.

## Globalization and offshoring



of supply chain leaders anticipate declines in globalization and offshore manufacturing, respectively, over the next 5 years.

## Remote and distributed teams



of supply chain leaders believe working from home will increase over the next 5 years.

Source: Gartner Future of Supply Chain 2021; KPMG 2021 CEO Outlook Pulse



# The organization agenda for the future of supply chain

Supply chains may see significant disruptions as they shift towards customer-centric offerings with demand-driven and automated networks.



## Customer-centric

Deliver a **customer-centric competitive advantage** through the understanding and meeting of customer expectations.



## Platforms

Be characterized by an **outside-in operating model empowered by as-a-service platforms**, which is driven by business, customer, and employee insights and powered by technology and talent.



## Cognitive decision centers

Be more **collaborative, transparent and evidence-based**, with cognitive decision centers complementing human decision-making, harnessing big data across the entire environment.



## Micro supply chains

**Balancing the cost of complexity with the value gained from offering a variety, rebalance global versus local supply chain** operations to better manage risks, enhance resiliency, and increase customer service levels.



## Ethical supply chains

As climate and social issues have found their place firmly on boardroom agendas, businesses realize they need to act to operationalize their sustainability strategy.



## Workforce

Deliver rapid workforce reskilling and hiring as an organizational critical success factor; focusing on **emerging digital skills** such as AI management, design thinking, predictive analytics and robotics.





Customer-  
centric

# Principles for a customer-centric supply chain

**A customer-centric supply chain is driven by visibility, insightful data, and a shared commitment to customers**



## Personal

Demonstrate that you understand the customers' specific circumstances and will adapt the experience accordingly



Customers now want highly customized "personalized" products and buying experiences



## Frictionless

Look at digital processes or technology options that can remove friction or improve decision making



Digital disruption is changing the world in which we live and work. Technological innovation should be hardwired into every stage of the supply chain



## Consistent

Provide the same brand experience across different channels and partners



It can be vital to ensure that all partners represent your brand and understand your customer promise to be able to deliver on customer expectations



## Trusted

Ensure each element of the supply chain is fully bought into building and maintaining customer trust

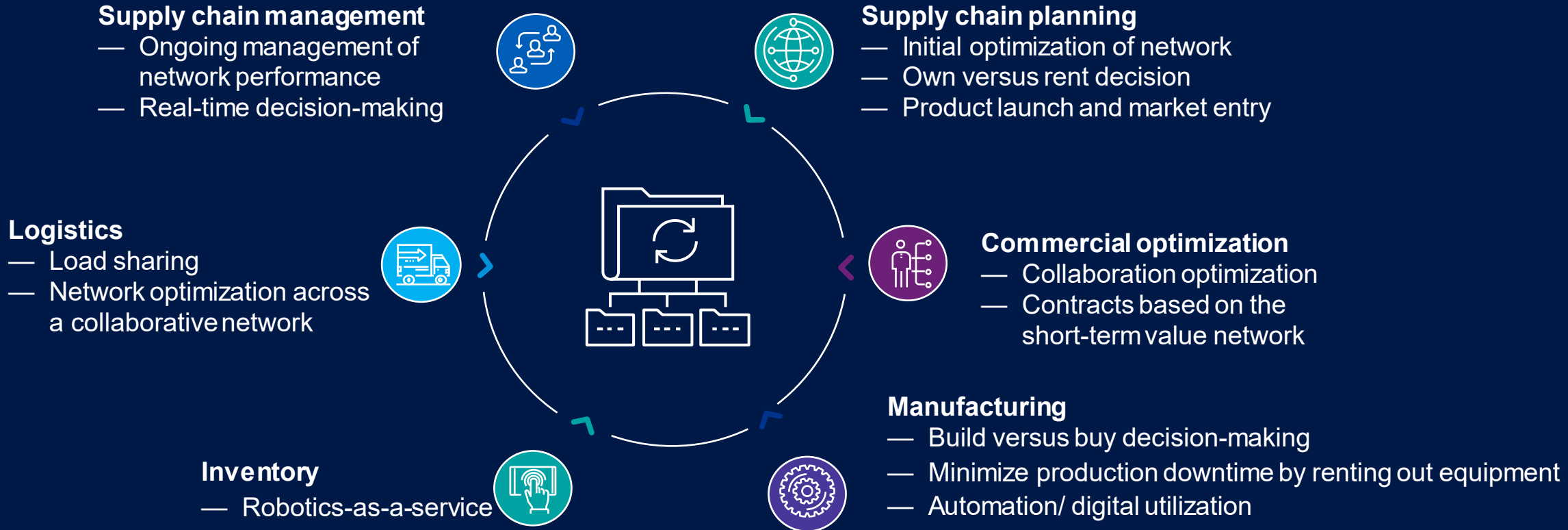


With a variety of internal and external parties involved in the supply chain, managers should constantly monitor the provenance that an authentic and consistent customer experience is being delivered




# Rise of supply-chain-as-a-service platforms

Platforms **Most parts of the supply chain can now be purchased from third parties or sold as a service**



## Example of Digital Technologies

  
Internet of Things and Sensors

  
Robotic Process Automation, Cognitive Technologies & AI

  
Blockchain

  
Virtual Reality/ Augmented Reality

  
Analytics and Data Science

  
Additive Manufacturing

  
Cloud

  
Cyber Security





# How cognitive decision centers can make an impact

Cognitive decision centers

Adds new capabilities

Drives new value and benefit



## Day-to-day execution

Arrive in the morning and the system advises you of changes made to existing shipments to account for changes in demand or weather.

**Potential benefits:**  
Efficiency and service level improvements



## Sales and operations planning

Run business scenarios in real time to help optimize revenue, volume, profit, and other metrics.

**Potential benefits:**  
Effectiveness and efficiency



## Performance improvement

Sentinels comb through data to find scenarios that historically have led to unprofitable situations, delays, or missed expectations.

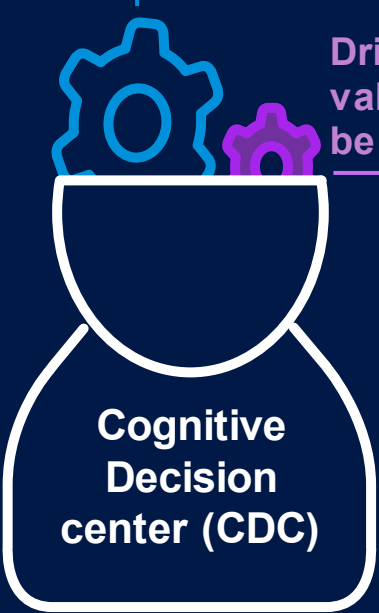
**Potential benefits:**  
Responsiveness and cost savings



## Profitable growth

Understand the profitability impact of business decisions around price, volume, mix, and fulfillment decisions in real time.

**Potential benefits:**  
Cost savings and effectiveness





# Micro supply chains

## Balancing the cost of complexity with the value gained from offering variety

Micro supply chains are mini operating models based around customers, not processes, and guide companies to customize products, policies, production systems, flows, and systems around specific customer segments.



### Highly flexible

Ability to react and scale quickly to changes in customer demands and expectations



### High Value with resilience

Create as much value as possible for the customer



### Independent

Serve individual segments while managing costs





# Get the ESG building blocks in place

**Moving from commitments to measurable action includes setting budgets and establishing clear accountabilities.**

For aspiring industry leaders in sustainability, prioritization can provide focus to go beyond sustainability reports:



## Roadmap

As a business path to success, roadmaps should consider the actions required to bring to life targets across all areas of sustainability, including ethical, environmental and economic. Identified risks and opportunities are sequenced into short-, medium- and long-term actions



## Accountability

A successful sustainability strategy moves accountability from CSR teams to operational and functional teams. Integrating the procurement and sustainability strategies can result in mobilization, clear accountability and responsibility



## Partners

External stakeholder groups and partnerships are engaged, recognizing that compliance may be difficult for some suppliers, they may need some assistance to align with your business's goals.



## Consumer view

You understand the voice of the customer and your strategy aligns with your consumers expectations (e.g. ethically produced and locally sourced goods)



## Budgets

The impacts of implementation have been costed and budgets monitored periodically



## Systematic monitoring

You have systems and tools in place to track and monitor data relating to the progress of your strategy and to provide data-driven insights



## Traceability

You have traceability of compliance through your supply chain, including end-to-end visibility, being able to screen, track and trace the movement of products across the supply chain and to assess the implications of the location of your tier 1, 2 and deeper suppliers



# Workforce of the future

Workforce

## Key characteristics of the new supply chain include:



### Digital and humans co-existing

The creation of a modern digital working environment where employees are less burdened with repetitive tasks, but key decision-making remains with the human experience.



### Digital center of excellence

The deployment of a digital center of excellence (DCoE) to provide leading practices, research, and analytics, leveraging AI, IoT, and other advanced techniques to support the strategic priorities of the organization



### Supply chain as a business partner

As the global landscape and technology continue to change, supply chain has emerged as a critical business partner and differentiator that tightly aligns the functions with the business strategy and accelerates critical decisions that help drive growth and performance



### New roles

New roles are expected to emerge with the convergence of advanced technology, a changing workforce structure, and a shifting supply chain ecosystem driven by customer-centric adaptability





# Supply Chain Risk Management - Planning for the Future

## Types of Risk

Organizations today need to have a comprehensive global perspective on how to identify and manage a range of complex supply chain risks to be resilient.



Type of Risk (Example)	Key Considerations (Example)
<b>Management Risks</b>	<ul style="list-style-type: none"> <li>Do we regularly monitor and track emerging threats and disruptions across the extended supply chain?</li> <li>Do we have effective reactive risk mitigation capabilities?</li> </ul>
<b>Financial Risks</b>	<ul style="list-style-type: none"> <li>Are our suppliers and customers financially stable?</li> <li>Do we have exchange rate risks and are they appropriately hedged?</li> </ul>
<b>Location Risks</b>	<ul style="list-style-type: none"> <li>Do we understand the impact of supplier locations on our risk exposure?</li> <li>Can we track in real-time events that are occurring in the world that might impact suppliers or our own supply chain performance?</li> </ul>
<b>Workforce Risks</b>	<ul style="list-style-type: none"> <li>Are demographic forces acting upon our workforce which impact our ability to manage our extended supply chains effectively?</li> <li>As we globalize our operations and customer base, are we exposed to new risks based on diverse cultures or ways of working?</li> </ul>
<b>Operational Risks</b>	<ul style="list-style-type: none"> <li>Do we have the flexibility and visibility into our extended supply chain to rapidly adapt to fluctuating demand or supply shortages?</li> <li>If a node in our network fails (e.g. supplier, manufacturing, distribution), how long would it take us to recover? Are there any scenarios that could cause us financial distress?</li> <li>Do we have cyber security risks across our operations?</li> </ul>
<b>Regulatory Risks</b>	<ul style="list-style-type: none"> <li>Are we certain that our operations are compliant with respect to all related regulations?</li> <li>Do we have comprehensive onboarding processes that include regulatory compliance checks for third parties?</li> </ul>



# Supply Chain Risk Management – Planning for the Future

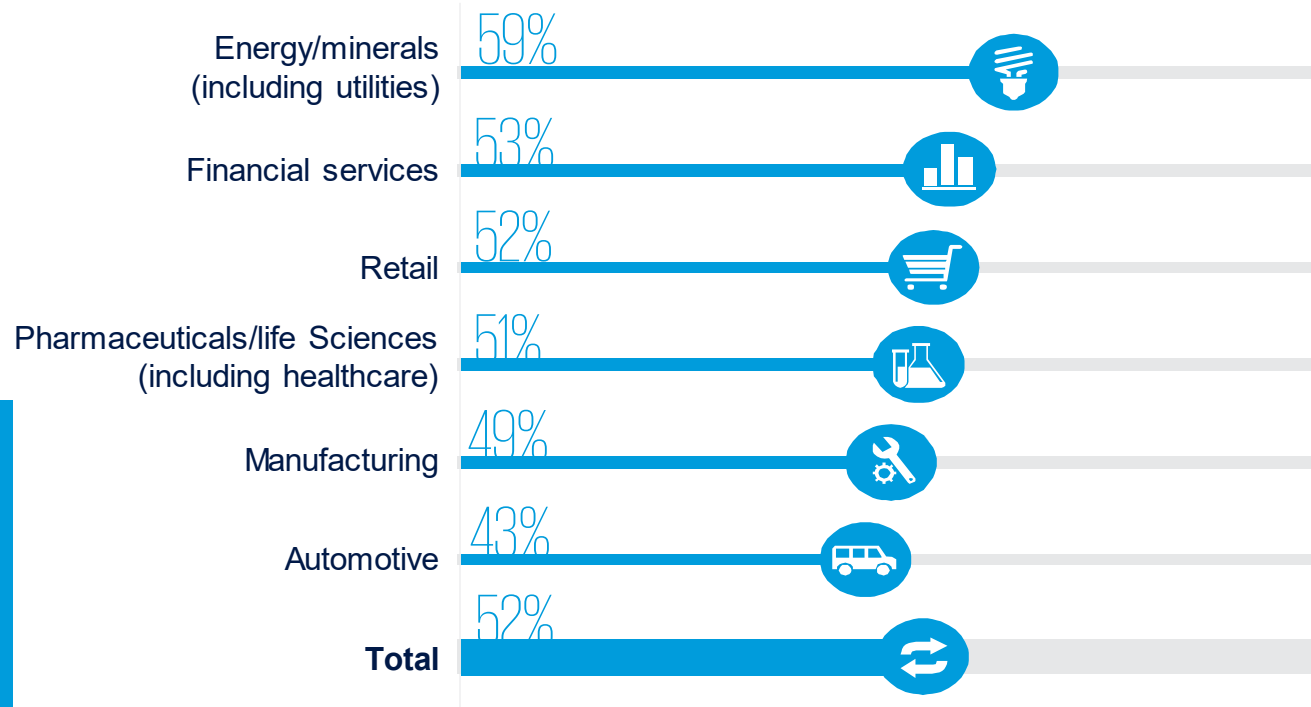
## Example Risk Highlight: Third-Party Risk Management (TPRM) Survey



**Key messages**

- Operational resilience needs more TPRM
- Organizations are under-resourced to effectively manage third-party risk

**We do not have sufficient capabilities in-house to manage all the third-party risks we face** Agree with this statement



Source: Third-Party Risk Management Outlook 2022, KPMG International, January 2022



# Supply Chain Risk Management – Planning for the Future

Supply Chain  
Risk Management

## Risk Strategy Development

To effectively respond to supply chain risks, organizations must combine multiple risk elements to formulate a resilient supply chain strategy. Key elements include:

### Define overall risk appetite and treatments for identified risks

- Does a full risk register of key operational risks exist across our supply chain?
- What is the optimal treatment?



### Increase visibility and transparency in the supply chain to identify vulnerabilities

- Single events and enterprise-wide. Is risk managed consistently?
- How are risks identified & assessed?



### Quantify the impact of potential risks

- Are my mitigation strategies/ plan effective?



### Establish a supply chain risk management governance model

- Resilient operating model - policies & procedures, roles & responsibilities, etc.



### Leverage technology to foster collaboration and information

- Predictive risk assessments, testing of mitigation strategies, simulating impacts, etc.



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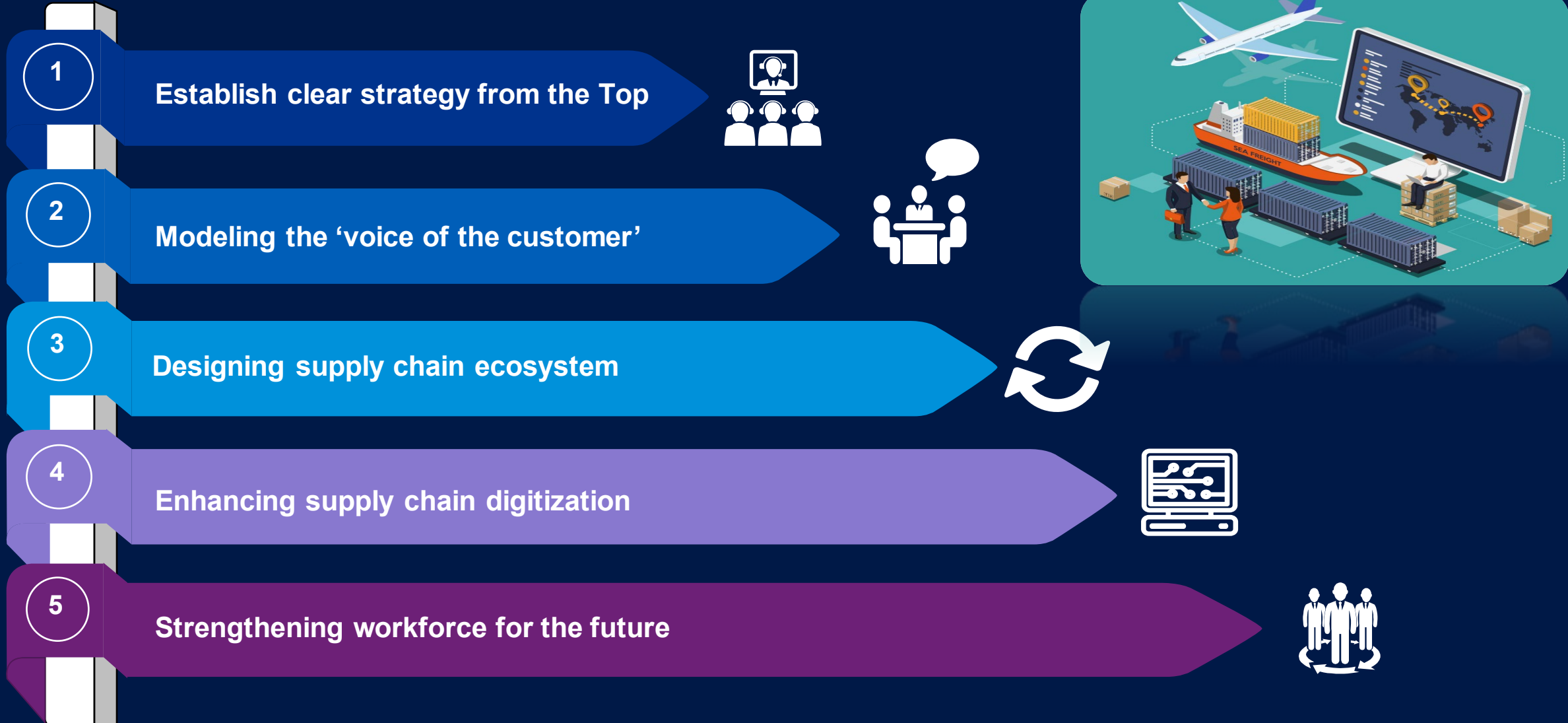


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# Key Takeaways and Next Steps





## Contact Detail



**Tidarat Chimluang**  
Partner, Management Consulting, Advisory  
Email : [tidarat@kpmg.co.th](mailto:tidarat@kpmg.co.th)



**Natawan, Tiyapiboonchaiya**  
Associate Director, Management Consulting, Advisory  
Email : [natawan@kpmg.co.th](mailto:natawan@kpmg.co.th)



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