

Transportation strategic vision 2026-2036

A C-suite foresight analysis
mapping the journey from
operational disruption to
technological domination



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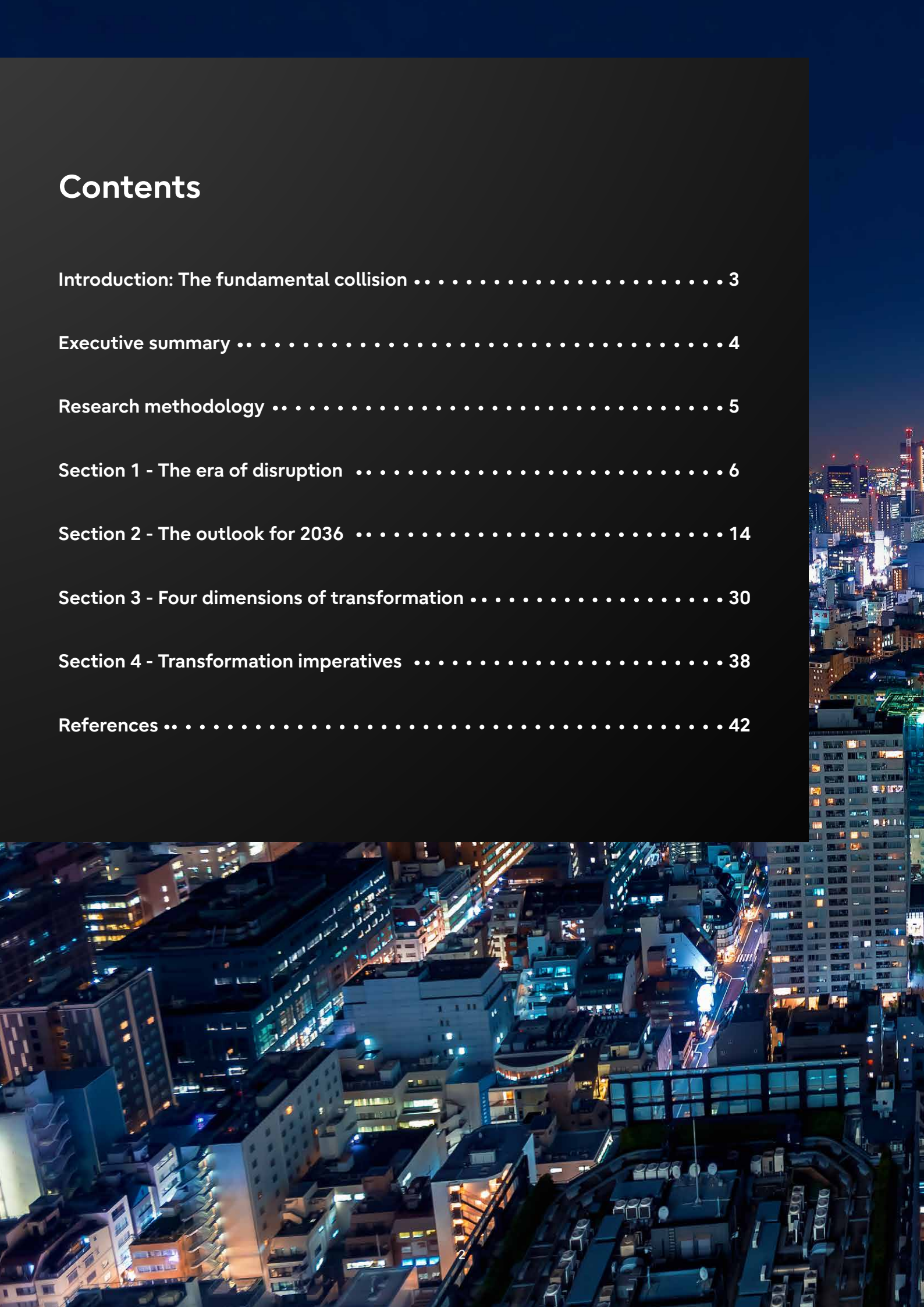
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An aerial night view of a city skyline, likely New York City, with numerous skyscrapers illuminated. In the foreground, a train station with multiple tracks and platforms is visible, with some tracks highlighted in green. The overall scene is dark, with the city lights providing the primary illumination.

Introduction:

The fundamental collision

Bridging the immediate operational inflection point with the long-term technological imperative in a dual speed economy.

The transportation landscape has entered a volatile new epoch, defined by a collision between immediate market pressures and rapid technological acceleration. Leaders are navigating a dual speed economy where the daily reality is dominated by unprecedented logistical shocks, a chronic shortage of skilled labour, and cost escalations reaching a forty year high. These immediate pressures are compounded by the fracturing of hyper globalised trade into distinct regional blocks, compelling executives to diversify supply chain architectures and build resilience against restricted technology transfers across borders.

To navigate this sustained turbulence, enterprise-wide technology integration serves as a leading structural mechanism to insulate organisations from market shocks. This report maps the strategic journey from managing today's margin pressures to engineering tomorrow's resilient enterprise. It bridges the capacity constraints of 2026 with the automated, sovereign technology imperatives required to thrive over the next decade.

Leaders need to transition from reactive crisis management to building an intelligent, data driven foundation capable of withstanding global fragmentation.

Executive summary

A dual speed view of the operational challenges defining today and the structural transformations required for the next decade.

The strategic mandate for Transportation leaders involves balancing the immediate fragility of global logistics with the long-term necessity of technological sovereignty. Success requires dismantling the legacy trap of siloed data to enable the automation needed to solve structural labor shortages. This report details the necessary pivot from current disruption to future resilience.

The era of steady disruption

The immediate landscape is defined by extreme cost volatility and a missing workforce. Leaders are forced to manage an aging demographic of highly skilled workers retiring while navigating regionalized trade blocs, making margin control exceptionally difficult.

Integrating intelligence and automation

Technology is the only structural solution to the demographic labor crisis. However, the path to enterprise-wide artificial intelligence is blocked by broken data pipes. Preparing for the four varied future scenarios requires building an agile, API driven foundation today.

Navigating risk and business model innovation

Commercial models need to pivot away from commodity transport towards integrated services that absorb regulatory and environmental complexity for clients, positioning the carrier as an indispensable strategic partner.

Strategic imperatives

Robust strategic routes serve as the operational lanes to navigate uncertainty. The ultimate goal is to execute common denominator actions that solve short term crises today while building automated, secure enterprise capable of thriving in any future geopolitical environment.



Research methodology

A multi-dimensional foresight approach

This research was conducted on behalf of Fujitsu by The Business Advantage Group Limited. It is based on a rigorous, hybrid foresight methodology designed to identify, analyze, and prioritize future trends and their strategic implications for Transportation leaders. Our approach combines quantitative environmental scanning with qualitative expert validation to ensure insights are both visionary and actionable.



www.Business-Advantage.com

Core methodology

Environmental scanning and weak signal analysis

A comprehensive scan identified over 70 trends and nearly 50 weak signals. The approach specifically tracked weak signals, early indicators of potential disruption, that could challenge current assumptions and herald future industrial revolutions.

PESTLE framework

All the identified phenomena were categorized using the PESTLE framework (political, economic, social, technological, legal, environmental) to ensure a holistic view of the external environment.

Uncertainty and impact analysis

Each trend was assessed on two C-level centric metrics: importance (strategic relevance) and outcome uncertainty (predictability of impact). High uncertainty and high importance trends formed the basis of our scenario planning.

Stakeholder and C-level validation

Insights were validated through focus group discussions (FGDs), review by industry experts and the core findings are derived from six in depth interviews with C-suite executives (CEOs, COOs, CTOs) across logistics, aviation, maritime, and final mile sectors from China, USA, Australia, UK, Canada, and Singapore.



Section

1

The era of disruption

Navigating the immediate operational crises and compounding external pressures currently defining the global Transportation Sector.



Summary:

The landscape of compounding crises

A summary of the immediate operational vulnerabilities and structural disablers defining the current transportation environment.

The objective of this section is to dissect the acute, near-term pressures that are fundamentally rewiring global supply chains, establishing the baseline operational reality before attempting long-term technological integration.

Key findings from the current operational landscape:

- The fracturing of hyper globalization into regional trade blocks is creating extreme cost volatility and compliance burdens.
- Client expectations have permanently shifted from lowest cost logistics to a demand for managed supply chain resilience.
- The Transportation Sector is heavily divided between sluggish legacy operators and highly agile, technology led new entrants.
- A chronic deficit of skilled labor, compounded by internal resistance to change, is severely limiting daily operational capacity.
- Fragmented legacy systems and broken data pipelines remain the primary barriers to deploying enterprise-wide automation.

Understanding the full scope of these compounding crises begins with examining the most unpredictable external threat currently unraveling supply networks.

The geopolitical fragmentation of trade

Unpredictable trade policies, shifting tariff regimes, and regional conflicts are dismantling hyper globalized supply networks and inflating operational costs.

The external environment is defined by severe geopolitical volatility. The unraveling of hyper globalization due to strategic competition is forcing a rapid reconfiguration of supply chains. Leaders are contending with shifting tariff regimes and the emergence of trade blocks, which introduce extreme unpredictability into long-term capacity planning.

This fragmentation creates a dual burden: carriers face increased compliance complexity and the threat of restricted access to critical technologies across borders. Consequently, operational costs are spiking as organizations are forced to build redundant, regionalized supply networks rather than relying on a single, globalized flow of goods. Operating successfully in this climate requires a fundamental shift away from lean, single source dependencies.

What is the most immediate external threat complicating your strategic capacity planning?

"The most immediate threat... is the geopolitical environment... trade wars, tariffs... makes it very difficult to plan."

Senior Vice President Global eCommerce | Logistics and Supply Chain | USA

Leaders should consider building parallel, regionalised supply chains to mitigate the risk of sudden geopolitical trade barriers.

Transitioning to value added resilience

Client expectations are shifting dramatically from lowest cost commodity transport to a demand for integrated, resilient supply chain solutions that absorb regulatory complexity.

The market is moving away from basic, cost driven logistics towards a demand for comprehensive supply chain resilience. Clients now require total end to end control and visibility, fundamentally altering the service expectation for carriers. Furthermore, the sustainability agenda has transitioned from a peripheral preference to a core commercial requirement, with heavy carbon emission regulations acting as a catalyst for new business models.

This shift presents a distinct opportunity for transportation providers to pivot. By managing this increased regulatory and environmental complexity on behalf of their clients, providers can elevate their market position from interchangeable vendors to indispensable strategic partners. Success dictates offering intelligent solutions rather than just physical cargo space.

How are client demands reshaping the core service offerings of transportation providers?

"Our mission is to be the number one global supply chain organization providing solutions for clients... a one stop shop that provides clients with a tailored solution."

Chief Technology Officer | Logistics and Supply Chain | UK

The market is actively penalizing rigid operators while rewarding those who offer flexible, integrated solutions that absorb client complexity.

The threat of agile disruption

The Transportation Sector is increasingly divided between sluggish legacy operators burdened by outdated infrastructure and highly agile, technology led new entrants.

The competitive landscape is experiencing a stark bifurcation. On one side, legacy transportation companies are burdened by outdated infrastructure and a cultural resistance to change. On the other side is a rising class of agile, technology first entrants that leverage data integration and artificial intelligence to operate with significantly lower overheads.

Additionally, heavy supplier consolidation is creating monopolistic conditions for critical parts and assets, further squeezing the margins of traditional operators. The primary competitive risk is no longer just direct industry peers, but the failure to match the technological investment and operational agility of these emerging challengers. Retaining market share requires adopting the operational nimbleness of a technology firm.

What competitive scenario represents the most significant risk to your current market position?

"If the number two and three competitors invest in new technology in a better way than us, they can easily bypass our position in the market. That is what will be the horrible nightmare for us."

Senior Vice President Supply Chain | Logistics and Supply Chain | China

Competitive advantage now relies on the speed of technological deployment rather than historical scale or legacy market share.



Navigating the missing workforce

Severe structural demographic shifts, an aging base of highly skilled workers, and deep rooted internal cultural resistance are constraining operational capacity.

The Transportation Sector is grappling with a severe, two pronged internal crisis: a chronic deficit of skilled labor and a deep rooted resistance to change. The industry is losing decades of institutional knowledge as an aging demographic of highly skilled workers retire. Simultaneously, the incoming workforce exhibits higher turnover rates, viewing roles as short term experiences rather than lifelong careers.

This demographic reality makes cost control exceptionally difficult. Compounding this labor shortage is a prevalent internal culture that is often operationally led rather than technology led, resulting in a workforce that is hesitant to adopt the very automation tools required to alleviate the capacity crunch. Addressing this requires immediate intervention at the leadership level.

What is the primary internal barrier preventing organizations from adapting to future technological demands?

"The primary pain point and constraint on growth for the ship management industry is the missing workforce, specifically the ongoing difficulty in finding, training, and retaining good quality technical crew."

Chief Financial Officer | Maritime Shipping | Singapore

Resolving the workforce crisis requires an immediate cultural shift to position automation as an augmentation of human effort, not a replacement.

Overcoming the legacy data trap

Disconnected infrastructure, siloed operations, and broken data pipelines are preventing the deployment of advanced automation across the enterprise.

While artificial intelligence and automation are acknowledged as imperatives, their implementation is critically obstructed by foundational technology barriers. Many organizations are operating on fragmented legacy systems that cannot communicate seamlessly with clients, regulators, or internal business units.

The primary hurdle is not the availability of advanced algorithms, but the absence of a unified, harmonized data architecture. Without robust data pipelines and modern enterprise resource planning integrations, the promised efficiencies of artificial intelligence remain inaccessible. Leaders are finding that before they can deploy complex robotics or predictive analytics, they need to first repair their basic digital plumbing to ensure clean data flows across the enterprise.

What specific technological advancement would provide the greatest immediate value to your daily operations?

"If partners can present me with solutions on how my ship enterprise resource planning system can be seamlessly integrated to my customers' systems and with the regulatory bodies, that will spur great interest."

Chief Financial Officer | Maritime Shipping | Singapore

Technology investments need to be aggressively redirected away from isolated pilot projects towards building a cohesive, API driven integration layer.

Transitioning from crisis to capability

Acknowledging and addressing immediate structural vulnerabilities is the mandatory prerequisite for designing the future hybrid enterprise and building long-term resilience.

The lived reality of the Transportation Sector is defined by a relentless convergence of geopolitical instability, systemic labor shortages, and the limitations of legacy technology. Cost escalation and logistical shocks are no longer anomalous events; they are the baseline operating conditions.

Survival in this environment requires a decisive shift away from reactive troubleshooting. Organizations need to stabilize their current operations by dismantling internal silos, securing supply chain redundancies, and beginning the arduous process of modernizing their data foundations. By addressing these acute disruptions today, companies can establish the operational stability needed to look toward the future in 2036.

What is the fundamental difference between companies that will survive this disruption and those that will fail?

"The Transportation Sector is defined by two diametrically opposing forces... new, tech-first entrants who disrupt, and sluggish legacy companies that are absolutely scared of change."

Chief Information Officer | Final Mile Healthcare | Canada

Overcoming these immediate structural disablers establishes the necessary foundation to integrate the advanced intelligence and automation required for the next decade.

The outlook for 2036

Mapping the external structural forces, critical uncertainties, and long-term strategic scenarios shaping the transportation industry over the next decade.





The strategic imperative of the long-term view

Shifting focus from immediate operational firefighting to establishing a visionary roadmap for long-term asset and capability planning.

While navigating the current era of disruption is critical for immediate survival, transportation leaders must simultaneously cast their vision towards the next decade. The industry is inherently capital intensive, relying on infrastructure, fleets, and technology platforms that require massive investment and extended deployment cycles.

Focusing solely on short term margin pressures risks institutionalizing obsolescence. Establishing a long-term strategic view is not an academic exercise; it is a commercial imperative to ensure that capital deployed today builds the capabilities required for the future. Leaders need to transition from reactive management to proactive foresight, establishing a clear timeline that guides the structural evolution of the enterprise.

Why is long-term forecasting critical for the Transportation Sector despite near term volatility?

"For the logistics sector and transportation, we are heavy assets, heavy investments. So, we are looking for a long-term outlook... maybe a longer forecasting. Looking for the 10 years, some properties like 30 years."

Senior Vice President Supply Chain | Logistics and Supply Chain | China

Leaders need to balance daily operational survival with the extended investment cycles required for heavy infrastructure and technology platforms.

From market signals to strategic scenarios

Translating complex global data points into coherent, actionable foresight to guide executive decision making.

The methodological foundation of this foresight analysis relies on separating systemic shifts from temporary industry noise. A comprehensive environmental scan identified dozens of macro trends and weak signals currently influencing the global logistics ecosystem. These data points were rigorously evaluated based on their potential strategic impact and the predictability of their outcomes.

By grouping these forces, we establish a structured lens to view the future. This approach ensures that leadership teams are not reacting blindly to daily headlines, but rather monitoring the deep, underlying currents that will dictate the commercial realities of 2036. The objective is to distill overwhelming complexity into clear, navigable pathways.

How should leadership teams approach the overwhelming volume of emerging industry trends?

"The biggest risk in my view is to not adopt fast enough. And the second is to focus on the noise as opposed to focusing on the actual impact. For example, focusing on the noise of blockchain instead of the impact of artificial intelligence."

Senior Vice President Global eCommerce |
Logistics and Supply Chain | USA

Effective foresight requires stripping away short-term distractions to focus strictly on the structural shifts that fundamentally alter the business model.

The structural forces driving transformation

Identifying the inescapable macroeconomic and technological trends that will shape all potential future environments.

Certain driving forces are so deeply embedded in the trajectory of the global economy that they will impact the Transportation Sector regardless of how political or social landscapes evolve. The demographic decline of the traditional workforce, the critical mandate for carbon reduction, and the absolute necessity of digital integration are universal realities.

These foundational drivers act as the baseline pressures forcing the industry to adapt. Artificial intelligence and advanced automation are no longer speculative advantages; they have become the mandatory tools required to offset the collapsing availability of human labor and manage the explosive complexity of modern supply chains. Ignoring these structural forces guarantees obsolescence.

What technology will act as the most critical driver of operational efficiency over the next decade?

"So, AI comes in... everybody has to get better and smarter and faster and cheaper... that is almost the perfect technology for transportation."

Chief Information Officer | Final Mile Healthcare | Canada

Enterprise-wide artificial intelligence and automation are universal imperatives that leaders should adopt regardless of how global trade structures ultimately evolve.

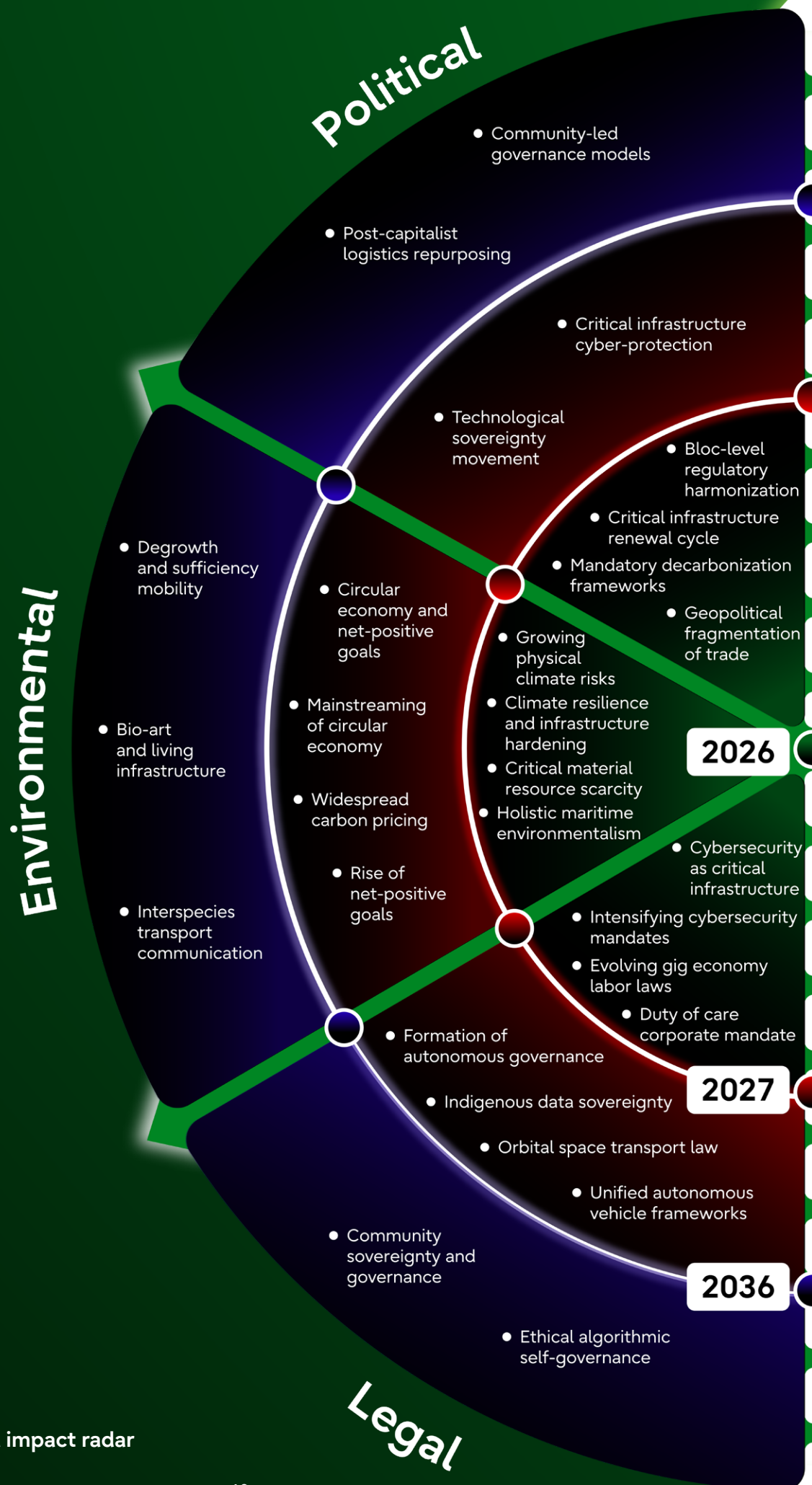
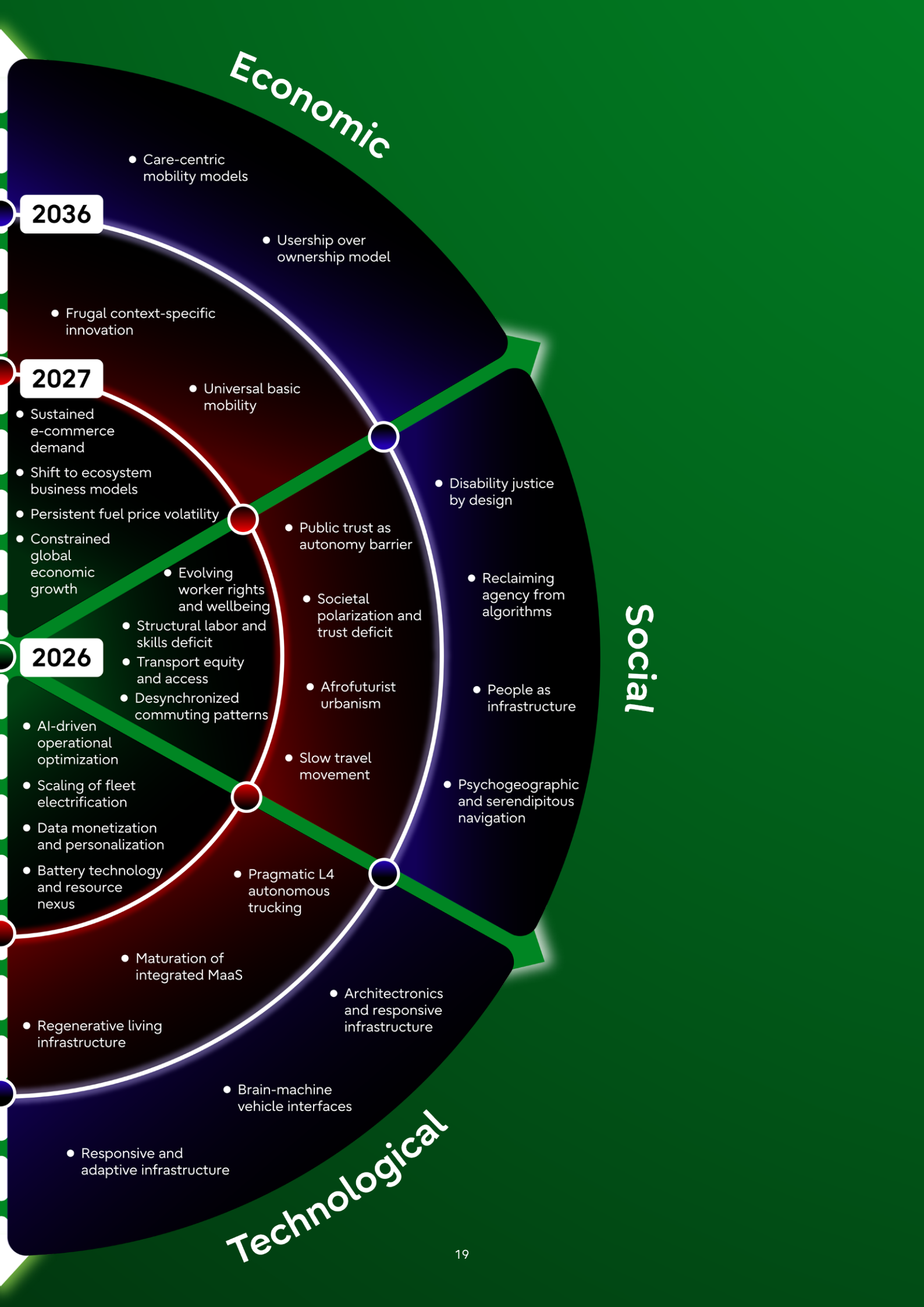


Figure 1: The macro-trend impact radar



Defining the critical axes of uncertainty

Framing the future through the intersection of technological velocity and the stability of the global operating environment.

To map the diverse possibilities of 2036, we isolated the two most critical and highly unpredictable forces shaping the sector. The first axis is the global operating environment, ranging from a highly integrated, cooperative geopolitical landscape to a fractured, protectionist frontier defined by trade barriers and hostility.

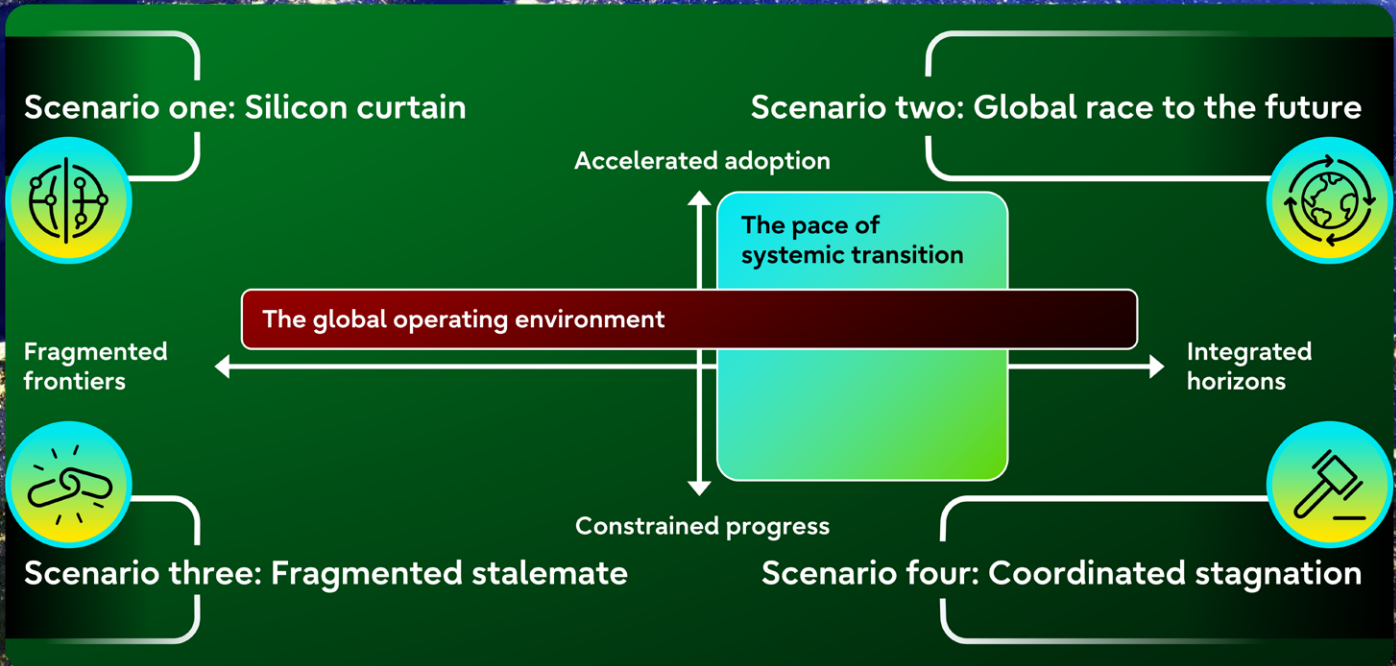
The second axis is the pace of systemic transition, measuring the speed of technological and infrastructural adoption; ranging from severely constrained progress to rapid, accelerated deployment. By intersecting these two axes, we create a matrix that reveals four distinct, highly plausible future scenarios. These are not strategic choices, but rather external realities that an organization must be prepared to survive.

How do differing international approaches complicate the rollout of global technology platforms?

"We are finding that, we do run a global platform, however... the platform may sit here... but in each individual country there is still a slight difference in operation."

Chief Technology Officer |
Logistics and Supply Chain | UK

Robust scenario planning relies on mapping the unpredictable nature of geopolitical fragmentation against the variable speed of systemic technological transition.



Two axes and four future scenarios

Figure 2: Transportation scenario matrix

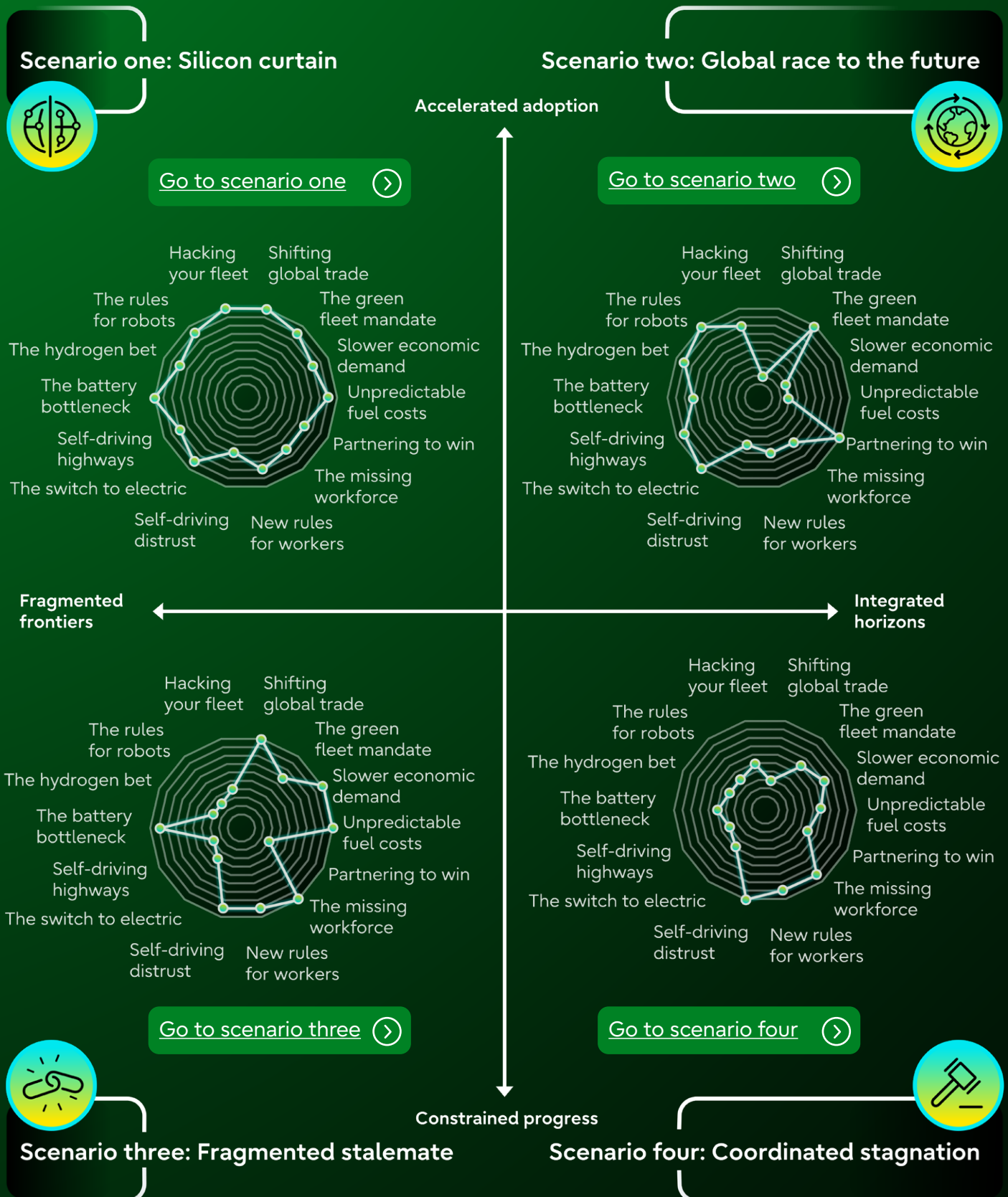


Figure 3: Comparative trend impact analysis

Scenario one: Silicon curtain



An environment defined by rapid technological acceleration occurring within highly fractured, protectionist global trade blocs.

The emergence of this scenario is signaled by a rise in aggressive national tech sovereignty policies, strict cross border data restrictions, and rapid but isolated advancements in proprietary artificial intelligence.

In this reality, the globalized supply chain has permanently shattered into distinct regional spheres of influence. While technological innovation moves at an accelerated pace, the transfer of this technology is severely restricted by geopolitical boundaries. Transportation providers face immense compliance burdens and the threat of catastrophic cyber attacks between rival blocs. Survival dictates that companies build entirely self sufficient, localized technology stacks to ensure their operations cannot be compromised by foreign sanctions or digital blockades.

How should organizations navigate the intersection of political tension and technological investment?

"We are not a politician. So yeah, we will still need to be focused on the... business interest and leveraging whatever technology we can."

Senior Vice President Supply Chain |
Logistics and Supply Chain | China

Strategic playbook:

- **Focus on:** Building highly redundant, regionalized supply chains that do not rely on single global nodes.
- **Focus on:** Developing in house, proprietary technological capabilities to ensure total operational sovereignty.
- **Move away from:** Assuming universal compatibility of digital platforms across different geopolitical zones.
- **Move away from:** Relying on international data sharing agreements to train central artificial intelligence models.

What the radar diagram shows:

The radar highlights extreme pressure in shifting global trade, hacking your fleet, and the battery bottleneck. This indicates an environment where geopolitical fragmentation and severe cybersecurity threats dominate, forcing companies to prioritize regional redundancies and total technological sovereignty over global efficiency.



Figure 4: Scenario one

Scenario two: Global race to the future



A highly integrated global landscape where rapid technological adoption drives unprecedented cross border efficiency and competition.

The emergence of this scenario is signaled by: a rise in international regulatory alignment, the establishment of global carbon pricing, and the rapid, collaborative deployment of autonomous logistics networks.

This is an environment of extreme optimization. Geopolitical cooperation allows for the seamless flow of goods, data, and green technology across borders. Consequently, the barrier to entry plummets, and the market becomes hyper competitive. Legacy operators are rapidly outpaced by nimble, data driven entrants who leverage global API standards to offer flawless, zero-emission delivery at a fraction of historical costs. In this scenario, market share belongs exclusively to the fastest innovators who can operate transparently across a borderless digital ecosystem.

What role should market leaders play in driving the transition towards sustainable transport?

"We were the first logistics company that gave clear targets towards sustainability and emission reduction... we aim to shape the industry."

Senior Vice President Global eCommerce |
Logistics and Supply Chain | USA

Strategic playbook:

- **Focus on:** Aggressively scaling artificial intelligence and automation to maintain pace with global efficiency benchmarks.
- **Focus on:** Forging deep ecosystem partnerships and open data sharing alliances across international borders.
- **Move away from:** Protecting legacy operational models that rely heavily on slow, manual human intervention.
- **Move away from:** Delaying the transition to sustainable energy, as global standards will swiftly penalize high emitters.

What the radar diagram shows:

The radar shows maximum impact across the switch to electric, the green fleet mandate, and self driving highways. This reflects a highly cooperative global push toward rapid decarbonization and frictionless autonomous logistics, where market share belongs exclusively to the fastest technological innovators.



Figure 5: Scenario two

Scenario three: Fragmented stalemate



A challenging operating environment characterized by both intense geopolitical friction and severely constrained technological progress.

The emergence of this scenario is signaled by a rise in prolonged trade wars, chronic underinvestment in structural grid infrastructure, and mounting public resistance to automated transport solutions.

This represents the most hostile operating climate. Supply chains are constantly disrupted by erratic tariffs and regional conflicts, while the promised technological solutions to these problems fail to materialize due to failing infrastructure and capital scarcity. The transition to electric fleets stalls, and the chronic labor shortage deepens without the relief of automation. Companies are trapped in a low margin battle for survival, where operational resilience and the aggressive protection of existing assets become the primary mechanisms for endurance.

What specific threat poses the greatest risk to operations in a fractured and digitally hostile environment?

"Cyber, without doubt. Absolutely, cyber... there's a lot of threat actors out there... that's getting worse, not better."

Chief Operating Officer | Aviation | Australia

Strategic playbook:

- **Focus on:** Securing long-term talent retention strategies to manage operations in the absence of mature automation.
- **Focus on:** Diversifying core service offerings to extract higher margins from stagnant, regionalized markets.
- **Move away from:** Over leveraging capital on theoretical technologies that lack the surrounding physical infrastructure to operate.
- **Move away from:** Depending on complex, multi continental supply chains that are highly vulnerable to political disruption.

What the radar diagram shows:

The radar spikes in unpredictable fuel costs, the missing workforce, and self-driving distrust. This signifies a stagnant, hostile landscape where technological progress stalls due to capital scarcity, leaving operators trapped in a low margin battle fighting chronic labor shortages and volatile operational costs.



Figure 6: Scenario three

Scenario four: Coordinated stagnation



A unified global market where systemic transitions are severely delayed by complex bureaucracies and infrastructural bottlenecks.

The emergence of this scenario is signaled by a rise in exhaustive international compliance frameworks, slow rollouts of alternative fuel networks, and a cautious, heavily regulated approach to artificial intelligence.

While geopolitical relations remain relatively stable and trade flows freely, the pace of change crawls. International regulatory bodies impose heavy bureaucratic burdens that stifle rapid innovation. The physical infrastructure required for alternative fuels and autonomous networks remains perpetually delayed by red tape. In this slow moving environment, the winners are those who excel at compliance and flawlessly manage complex regulatory requirements on behalf of their clients, rather than those taking massive risks on pioneering unproven technologies.

How should organizations balance the pressure to innovate with the immense risks of adopting immature technologies?

"You need to be a fast follower not at the bleeding edge. As an example... when an autonomous 18-wheeler ploughs into a minivan... they're going to get sued... I'm more than happy for my competitor to have that \$500 million lawsuit."

Chief Information Officer | Final Mile Healthcare | Canada

Strategic playbook:

- **Focus on:** Excelling in regulatory compliance and positioning as a trusted partner capable of managing administrative complexity for clients.
- **Focus on:** Optimizing existing legacy assets to extend their lifecycle while waiting for next generation infrastructure to mature.
- **Move away from:** Aggressively retiring carbon heavy fleets before viable alternative networks are fully operational across key routes.
- **Move away from:** Taking on the massive financial and legal risks of pioneering unregulated autonomous technologies.

What the radar diagram shows:

The radar indicates strong structural pressure from slower economic demand, new rules for workers, and the missing workforce. This depicts a highly regulated, bureaucratic environment that prioritizes rigid compliance and workforce protection, severely delaying the rollout of advanced automation and alternative fuel infrastructure.



Figure 7: Scenario four

Monitoring peripheral emerging signals

Tracking the weak signals and early indicators that could rapidly disrupt the projected pathways of the Transportation Sector.

To navigate these scenarios effectively, organizations need to establish continuous environmental scanning mechanisms. Leaders must monitor the periphery of the industry for weak signals that indicate a sudden shift in the operating environment. These include breakthroughs in alternative propulsion like hydrogen or nuclear micro reactors, unexpected shifts in consumer sustainability demands, or the sudden weaponization of advanced computing by hostile actors.

A static strategic plan is dangerous in a fluid world. By actively monitoring these emerging signals, the C-suite can detect the early symptoms of a specific scenario taking root, allowing them to adjust their capital allocation and operational posture before a crisis fully matures.

How should leadership balance immediate technology investment with preparing for peripheral, emerging disruptions?

"I think it's probably going too quickly... finding the happy medium is difficult... it's almost like buying stocks and shares. You have to sort of spread your investments across a number of areas."

Chief Technology Officer | Logistics and Supply Chain | UK

Organizations should implement robust intelligence gathering to detect subtle shifts in alternative fuels, shifting demographics, and non-traditional competitors.

Emerging signals that could redefine the industry:

- **Geopolitical supply chain disruption:**
The strategic restructuring of global logistics from efficiency optimized to resilience focused models, driven by geopolitical conflicts.
- **Transport as diplomatic infrastructure:**
The use of strategic transport projects (e.g., ports, rail corridors) as tools of foreign policy and geopolitical influence.
- **Integrated regional transport blocks:**
The formation of integrated transport cooperation agreements between nations to foster cross border self reliance.
- **Critical infrastructure cyber protection:**
Heightened political and regulatory focus on protecting strategic transport assets from state sponsored cyber threats.
- **Technological sovereignty movement:**
A political shift where cities reclaim democratic control over their digital transport infrastructure, promoting open-source standards.
- **Ownership to usership shift:**
The cultural and economic shift away from private vehicle ownership towards a usership model enabled by transport as a service (TaaS) platforms.
- **Contested gig labor futures:**
A structural conflict over the gig economy, pitting the established, algorithm driven model against platform cooperativism and unionized digital labor.
- **Mobility as a public good:**
The convergence of legal frameworks defining transport as a fundamental human right alongside economic models like universal basic mobility.
- **Maturation of circular logistics:**
The circular economy's shift from a niche concept to a mature investment thesis, driving deep capital into reverse logistics.
- **AI driven dynamic pricing:**
The widespread use of AI algorithms by transport operators to adjust capacity and pricing in real time based on demand, weather, and traffic conditions.
- **Care centric mobility models:**
The development of alternative transport networks specifically designed to prioritize and support the care economy and unpaid labor.
- **Frugal and context specific innovation:**
An approach to vehicle design for developing regions that prioritizes extreme affordability, local manufacturing, and robustness over high tech features.
- **Degrowth and sufficiency mobility:**
A radical environmental movement challenging the green growth paradigm, advocating for reorganizing society to require less transport rather than just greener transport.

Designing the hybrid enterprise

Acknowledging that scenarios are external realities to prepare for, requiring a flexible, adaptable operational foundation.

The four foresight scenarios detailed in this section are not strategic menus from which an executive team can choose. They are highly probable external realities dictated by macroeconomic forces beyond the control of any single organization.

The ultimate strategic goal is not to predict exactly which scenario will occur, but to engineer a business model capable of surviving all of them. This requires building a hybrid enterprise characterized by agile decision making, modular technology architecture, and a culture that views change as a continuous operational state. True resilience is the ability to pivot seamlessly regardless of how the geopolitical or technological landscape shifts.

What is the most valuable approach to shaping a resilient future strategy in a time of deep uncertainty?

"Learning from your own mistakes is wise. Learning from others mistake is the wiser."

Chief Financial Officer | Maritime Shipping | Singapore

Building this adaptable foundation requires leaders to systematically address the four specific internal dimensions of transformation detailed in the following section.



Four dimensions of transformation

Overcoming internal structural disablers
and leveraging technological enablers to
build a resilient hybrid enterprise.

The transformation battlegrounds

Addressing the critical internal barriers that prevent organizations from adapting to the shifting external environment.

To build the hybrid enterprise capable of thriving in any of the varied 2036 scenarios, leaders need to systematically address four internal battlegrounds. This requires neutralizing deep rooted structural disablers. Such as, fragmented legacy data systems, cultural resistance to automation, and outdated commodity business models.

Simultaneously, organizations should aggressively deploy advanced technological enablers. This transition is incredibly challenging, requiring a fundamental shift in both operations and corporate culture. By executing a targeted response across these four dimensions, leadership teams can ensure their capital investments directly translate into long-term commercial resilience.

What is the primary internal challenge when implementing a global structural transformation strategy?

"We have a number of cultural challenges... the cultural differences are very apparent and that is a challenge... we are on the way we are certainly not there yet."

Chief Technology Officer | Logistics and Supply Chain | UK

The transformation journey begins by dismantling the legacy data silos that currently block enterprise-wide intelligence.

Dimension one: The data maturity and integration response

Overcoming fragmented legacy systems to build a cohesive, API driven foundation capable of enabling enterprise-wide artificial intelligence.

Transformation response:

Leaders should transition away from isolated technology pilot projects and focus entirely on repairing their basic digital plumbing. Building a harmonized data architecture is the mandatory prerequisite before an organization can successfully deploy predictive analytics or advanced robotics.

Managing the disablers:

- **Disabler (fragmented infrastructure):** legacy operational technology and disconnected enterprise resource planning systems trap critical operational data in inaccessible silos.
- **Response:** organizations are aggressively remapping business processes and establishing universal data governance standards to ensure clean, reliable information flows.

Leveraging the enablers:

- **Enabler (API integration layers):** Deploying flexible interfaces that allow disparate legacy systems to communicate seamlessly with modern artificial intelligence tools and external client platforms.
- **Enabler (cloud-based data lakes):** Centralizing operational information to create a single source of truth, enabling real-time supply chain visibility across the entire network.

A robust, integrated data foundation is the essential bridge between sluggish legacy operations and the agile, automated future.

Where should organizations focus their immediate technology investments to build future digital resilience?

"We are focusing on consolidation, refining our current capabilities, and implementing global platforms across the enterprise."

Chief Technology Officer | Logistics and Supply Chain | UK

Dimension Two: The automation and workforce resilience response

Deploying advanced artificial intelligence and robotics to decouple operational capacity from the severe demographic labor shortage.

Transformation response:

With the traditional labor pool rapidly shrinking, companies need to fundamentally alter their operational models. Technology should be deployed not just to augment the workforce, but to completely automate repetitive tasks, ensuring business continuity regardless of demographic shifts or high turnover rates.

Managing the disablers:

- **Disabler (cultural resistance):** A prevalent internal fear of change where operators view automation as a direct threat to their livelihood rather than a necessary evolution.
- **Response:** Leadership teams are initiating comprehensive change management programs to reposition artificial intelligence as a support tool that elevates human roles.

Leveraging the enablers:

- **Enabler (generative artificial intelligence):** Utilizing advanced language models to automate customer service, compliance documentation, and complex administrative workflows.
- **Enabler (autonomous robotics):** Deploying automated guided vehicles and drones within warehousing and final mile environments to offset the physical labor deficit.

True workforce resilience is achieved when automation becomes the primary engine of daily operations, supported by a highly skilled human oversight team.

What are the critical technological pillars required to maintain operational capacity over the next decade?

"The key pillars crucial for achieving this vision are the adoption of robotics and automation, and the adoption of AI across the organization."

Senior Vice President Global eCommerce | Logistics and Supply Chain | USA

Dimension three: The technology sovereignty and regionalization response

Developing proprietary, in-house technological capabilities to ensure total operational independence amid increasing geopolitical fragmentation.

Transformation response:

As global trade fractures into distinct blocs, reliance on external, international technology providers becomes a critical vulnerability. Organizations should focus on building proprietary systems and bespoke algorithms that remain fully operational, even if cross border technology transfers are severely restricted by national policies.

Managing the disablers:

- **Disabler (vendor dependency):** A historical reliance on off the shelf, globalized software solutions that may become restricted, sanctioned, or non-compliant under new geopolitical trade regimes.
- **Response:** Companies are aggressively auditing their technology stacks to identify vulnerabilities and bringing the development of mission critical platforms in house.

Leveraging the enablers:

- **Enabler (bespoke artificial intelligence):** Developing proprietary machine learning models trained entirely on internal, sovereign data to protect against external intellectual property risks.
- **Enabler (decentralized edge computing):** Processing critical operational data locally within specific regions to ensure absolute compliance with strict national data residency laws.

Securing technology sovereignty guarantees that an organization retains absolute control over its operational nervous system regardless of external political conflicts.

How should organizations approach structural capability building within a highly volatile global environment?

"The world is disintegrating into geopolitical blocs; we are already working to align our supply chains with these blocks to make the business more resilient. This means we must look for new partnerships or develop the capability to do it in house, creating bespoke solutions that become intellectual property for our business."

Chief Operating Officer | Aviation | Australia

Dimension four: The business model innovation and compliance response

Transitioning from traditional commodity logistics to offering value added services that absorb regulatory and environmental complexity for clients.

Transformation response:

The commoditization of basic transport means profit margins will continue to shrink under the weight of rising costs. To survive, companies need to evolve into integrated supply chain partners, offering complex, consultative solutions that manage strict carbon emission targets and intricate cross border compliance on behalf of the customer.

Managing the disablers:

- **Disabler (margin erosion):** The inability to compete purely on price as operational costs jump and highly agile new entrants undercut traditional legacy rates.
- **Response:** Leaders are diversifying revenue streams by monetizing their internal supply chain visibility and offering it as a premium, risk management service to clients.

Leveraging the enablers:

- **Enabler (carbon tracking platforms):** Utilizing digital tools to provide clients with precise, verifiable emissions data across their entire supply chain to meet stringent environmental regulations.
- **Enabler (predictive risk modeling):** Deploying advanced analytics to forecast supply chain disruptions, allowing clients to proactively reroute goods before costly bottlenecks occur.

The most profitable future business models will monetize the absorption and management of external market complexity.

What is the primary strategic objective for service evolution over the coming decade?

"Our mission for the next ten years is to provide value added ship management services to our clients by becoming the most cost efficient in terms of total cost of ownership."

Chief Financial Officer | Maritime shipping | Singapore

Overview:

Synthesizing the transformation battlegrounds

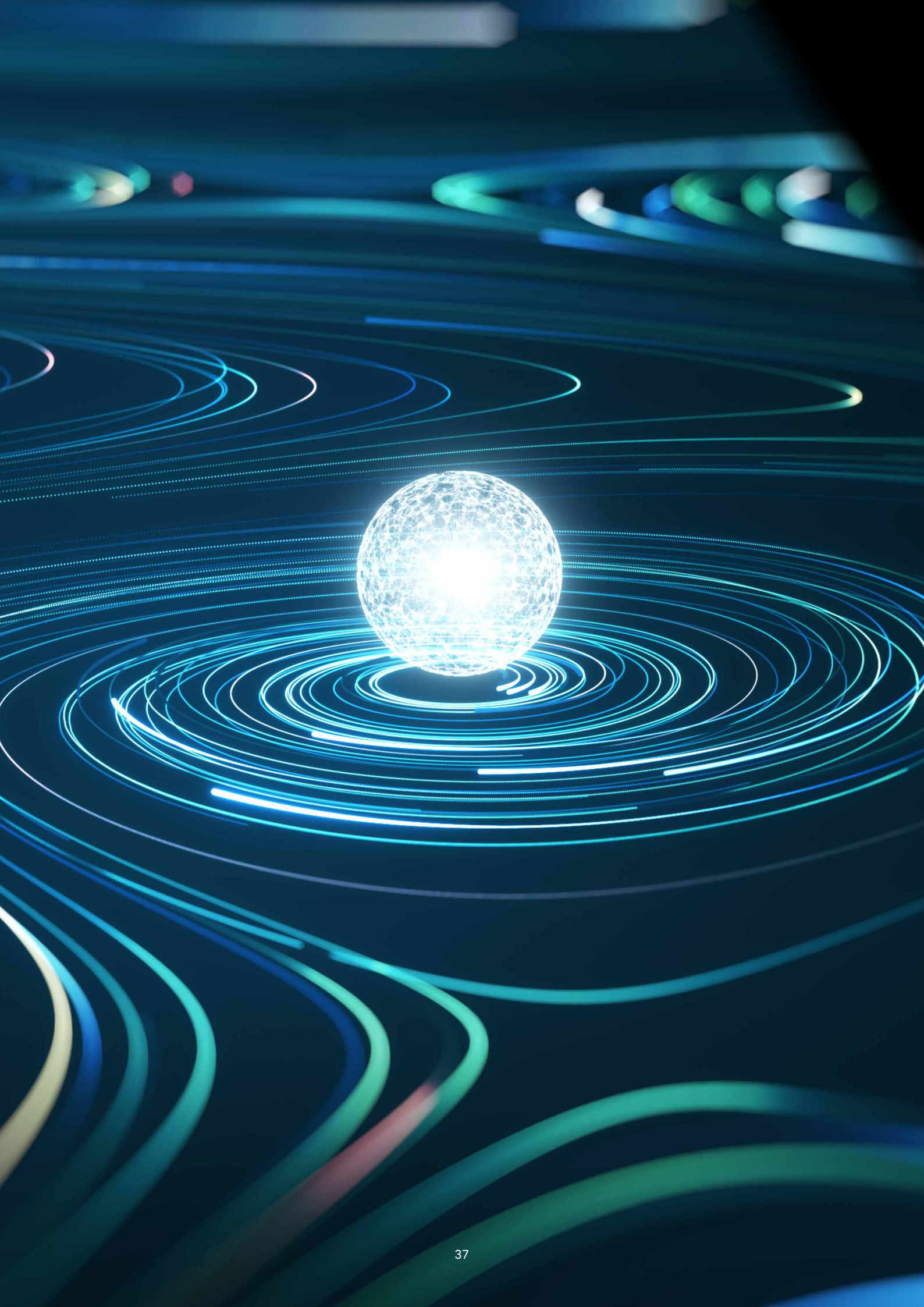
A comprehensive summary of the internal structural shifts required to build a resilient, adaptable enterprise ready for the next decade.

The objective of this section is to outline the internal transformations required to neutralize structural disablers and leverage technological enablers, ultimately building a hybrid enterprise capable of thriving in any future scenario.

Key findings from the transformation battlegrounds:

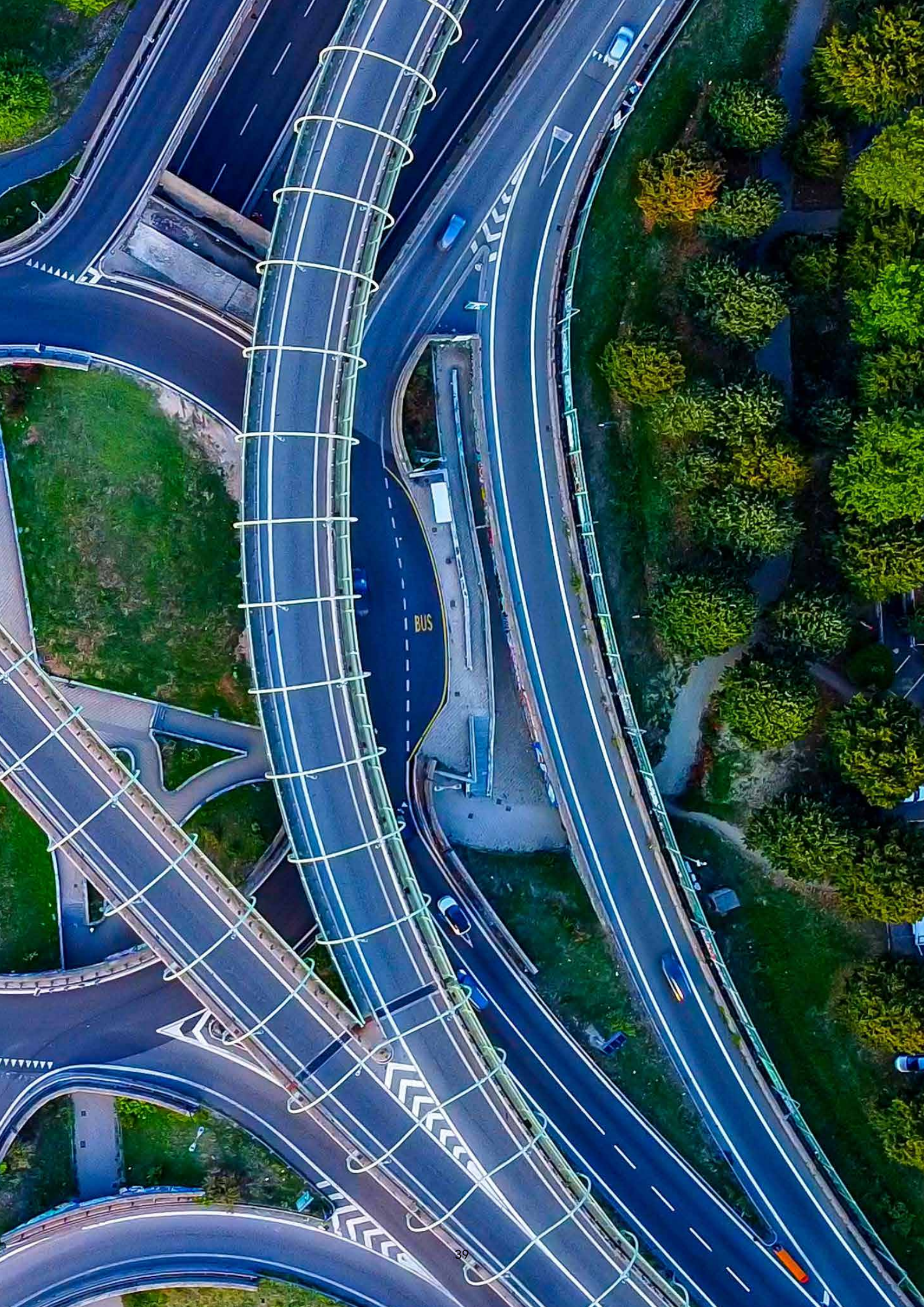
- **Data maturity:** Organizations need to dismantle legacy data silos and build a cohesive, API driven foundation to enable enterprise-wide artificial intelligence.
- **Workforce resilience:** Leaders must neutralize the demographic labor shortage by deploying advanced automation and shifting internal culture to view robotics as an augmentation of human effort.
- **Technology sovereignty:** Securing operational independence requires the aggressive development of proprietary, in-house technological capabilities that can withstand severe geopolitical fragmentation.
- **Business model innovation:** Survival dictates evolving the core commercial model away from commodity transport towards integrated, value-added services that manage regulatory and environmental complexity for clients.

With the internal transformation battlegrounds clearly defined, the final step is to translate these capability shifts into concrete, actionable strategic imperatives for immediate deployment.



Transformation imperatives

Translating strategic foresight into concrete, actionable steps to secure long-term market leadership.



From operational survival to market supremacy

Establishing the definitive strategic moves required to transition from reactive crisis management to proactive industry leadership.

Navigating the coming decade requires more than just operational endurance; it demands a decisive transition toward market supremacy. Leaders should consider moving beyond traditional cost cutting measures to strategically invest in technologies that offer clear competitive differentiation.

The most successful organizations will be those that actively reshape their business models to absorb client complexity, turning regulatory and environmental burdens into profitable, value-added services. By combining deep industry expertise with advanced predictive analytics, companies can elevate their status from interchangeable logistics vendors to indispensable strategic partners.

Where are leaders currently directing capital to improve both efficiency and client satisfaction?

"We are investing heavily in technology, particularly using generative AI as virtual customer service representatives to refine efficiency and customer experience."

Senior Vice President Supply Chain |
Logistics and Supply Chain | China

Market supremacy belongs to organizations that actively monetize their technological investments by offering complex, integrated supply chain solutions.



The common denominator action plan

A unified strategic playbook designed to build immediate resilience regardless of which future scenario materializes.

Because the exact nature of the 2036 landscape remains uncertain, leadership teams need to execute strategies that offer universal utility. These common denominator actions are mandatory structural upgrades that provide immediate return on investment today while building the necessary foundation for any of the four potential future scenarios.

By aggressively repairing foundational data architectures, modernizing the workforce through automation, and securing regional supply chain redundancies, organizations establish a highly adaptable operational baseline. These initiatives act as the ultimate insurance policy against external volatility, ensuring the enterprise remains functional whether the world fractures or integrates.

How should organizations position their service offerings to stand out in a highly commoditized market?

"We are a solutions company focused on the end to end supply chain, operating as a one stop shop that provides clients with a tailored solution. I see us as chefs who create a dedicated recipe for our clients, and our goal is to be a differentiator in the market."

Chief Technology Officer |
Logistics and Supply Chain | UK

Strategic playbook:

- **Focus on:** Establishing a harmonized, API driven data architecture to enable enterprise-wide visibility and artificial intelligence integration.
- **Focus on:** Retraining the existing workforce to operate alongside advanced robotics, positioning automation as an augmentation tool.
- **Move away from:** Relying on single, hyper globalized supply chain nodes that are highly vulnerable to geopolitical fragmentation.
- **Move away from:** Delaying foundational digital infrastructure upgrades while waiting for absolute certainty in the external market.





How Fujitsu can help: Enabling the hybrid transformation journey

Positioning Uvance as the strategic partner to deliver consulting, agile solutions, and advanced technological integration.

The journey from legacy operations to an automated, hybrid enterprise is exceptionally complex and cannot be executed in isolation. It requires a strategic partner capable of delivering both visionary consulting and concrete technological architecture.

Uvance provides the integrated solutions needed to dismantle deeply entrenched data silos, secure technology sovereignty, and deploy enterprise-wide artificial intelligence. By leveraging a vast global ecosystem and deep industry expertise, we empower transportation leaders to navigate the current era of operational disruption and confidently engineer a highly resilient future state.

What makes strategic insights and solutions from a technology partner truly actionable for an enterprise?

"The hardest part is being the first business that walks through the door to take up a new vision. To make it actionable, the technology firm has to prove the technology is mature enough, and the most actionable approach is for the tech firm to partner with a business that has a culture of change"

Chief Operating Officer | Aviation | Australia

Partnering with a comprehensive technology integrator ensures that bold strategic foresight is seamlessly translated into operational reality.



Fujitsu Technology and Service Vision (FT&SV)

The evolving story of Fujitsu insights into the future, updated annually and covering the Fujitsu approach to the main issues raised in the CxO survey.

global.fujitsu/en-global/about/vision



Profile of respondents:

Our insights are drawn from a diverse panel of leaders representing the full spectrum of the transportation industry; from billion dollar global logistics giants to specialized maritime and aviation firms.

- **Logistics and Supply Chain:**
 - SVP Supply Chain | China | \$500M - <\$1B
 - SVP Global eCommerce | USA | >\$20B
 - CTO | UK | \$500M - <\$1B
- **Aviation:**
 - COO | Australia | \$500M - <\$1B
- **Maritime Shipping:**
 - CFO | Singapore | \$100M - <\$500M
- **Final Mile Healthcare:**
 - CIO | Canada | \$100M - <\$500M

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This research was conducted on behalf of Fujitsu by The Business Advantage Group Limited.



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