Forto Logistics Trend Compass 2025

AI meets logistics - A digital transformation journey

forto

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Navigating the future

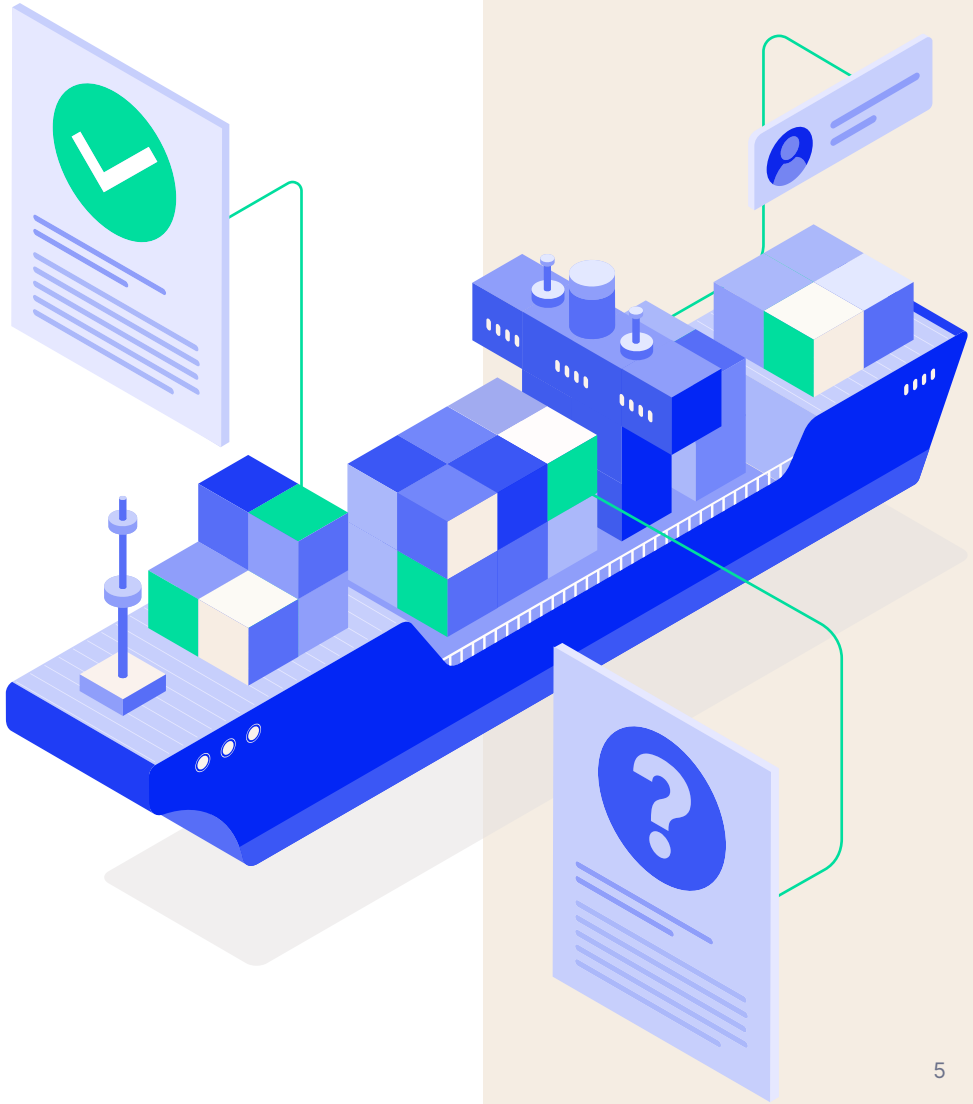
Welcome aboard the Forto Logistics Trend Compass - your guide through the ever-evolving global logistics landscape

A trustworthy guide through an industry in motion

The logistics and supply chain sector operates within a landscape shaped by technological advancements, shifting global trade dynamics, and evolving market pressures. Understanding the current state and future trajectory of this field is essential for professionals navigating its complexities.

This report presents findings from a survey of 271 logistics, supply chain, and purchasing professionals conducted between December 2024 and February 2025. It examines operational realities, including transport preferences, supply chain complexity, and digitalization levels. Furthermore, the report identifies the primary challenges organizations face today and explores the anticipated impact of key trends, with a particular focus on Artificial Intelligence.

The insights gathered aim to provide a clear perspective on industry priorities and the criteria shaping decisions in a demanding environment, enabling professionals like you to chart a confident course forward for your business.



What you can expect

This report delves into the current state and anticipated evolution of the logistics and supply chain industry, based on insights gathered from key professionals across diverse sectors. It examines operational practices, prevailing challenges, the impact of technological advancements, and shifting expectations for service providers.

Chapter 1

Mapping the modern business landscape: Key challenges and trends

This initial chapter sets the stage by exploring the complex operating environment for logistics professionals today and identifying the dominant forces shaping the industry's future.

- What are the most significant competitive, economic, and operational challenges organizations face in supply chain management?
- Which emerging trends, particularly technological advancements and sustainability, are perceived to have the greatest future impact?
- How do current levels of supply chain complexity and digitalization vary across organizations?

Chapter 2

Assessing the state of AI: Estimated impact and benefits, adoption status, and challenges

The second chapter focuses specifically on Artificial Intelligence, examining its perceived role, current adoption status, and the hurdles to wider implementation within logistics operations.

- What level of impact is Artificial Intelligence expected to have on the industry and specific supply chain functions?
- What are the key benefits and practical use cases currently being explored or implemented?
- How familiar are professionals with AI technologies, and what are the primary barriers (cost, skills, security) hindering adoption?

Chapter 3

Excursion: Shifting expectations in freight forwarding

This chapter explores how broader industry trends and technological advancements are reshaping what clients demand from their freight forwarding partners, moving beyond traditional service models.

- Excluding price, what factors (like service quality, technology, sustainability) are most critical in selecting a freight forwarder today?
- How are digital services and technological innovation changing the requirements for logistics providers?
- What capabilities must forwarders prioritize to build resilient and value-driven partnerships for the future?

Thoughts from the CEO

As the logistics sector enters a new phase of transformation, understanding where we are headed is more important than ever.

The “Forto Logistics Trend Compass 2025” report captures the view of over 270 logistics professionals across Europe, and one message comes through clearly: From the shift to smarter, AI-powered decision-making to the need for operational resilience and service quality, the future belongs to those who execute with focus and precision.

At Forto, we see this not as disruption - but as an opportunity to simplify, adapt and lead.

This report is not just about trends. It is a tool to support sharper decisions, more agile operations, and better customer outcomes. I hope it helps you navigate what comes next - with clarity and resolve.

Guillaume Petit-Perrin
CEO, Forto

Guillaume Petit-Perrin

Management summary

The “Forto Logistics Trend Compass 2025” encapsulates a pivotal moment for the logistics and supply chain industry, marked by rapid advancements in Artificial Intelligence (AI) and increasing demands for sustainability. Our extensive survey, involving 271 professionals, reveals a sector at the cusp of significant transformation, driven by technological innovation and environmental considerations.

Key insights from the report underscore the critical role of AI in enhancing operational efficiencies and decision-making processes. Despite the high expectations for AI, its adoption across the industry remains varied, with many companies grappling with challenges such as cost, the need for specialized skills, and data security concerns.

Sustainability emerges as another dominant theme, with regulatory pressures and consumer expectations pushing companies towards greener logistics solutions. This shift is not merely about compliance but is integral to long-term strategic planning and risk management.

In conclusion, the future of logistics demands a proactive approach, integrating AI to drive efficiency and embracing sustainability to ensure resilience. Companies that adapt to these imperatives will lead in developing robust, future-proof supply chains.

Survey methodology and sample breakdown

The report is based on 271 total responses collected from December 2024 to February 2025 through an online survey targeting key professionals with managerial or operational responsibilities in supply chain management, logistics, or purchasing. The respondents are located across various industries and regions.

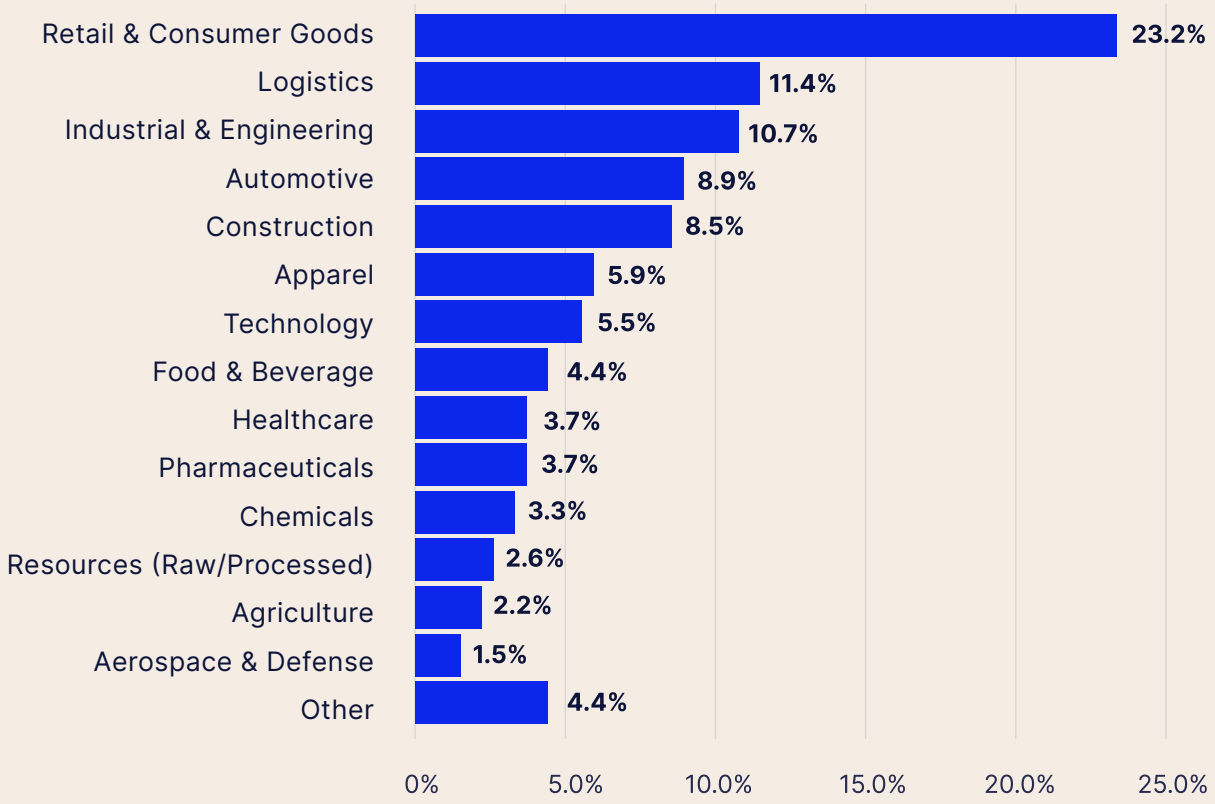
By combining quantitative and qualitative questions, we captured both the scale of emerging trends and the reasoning behind them.

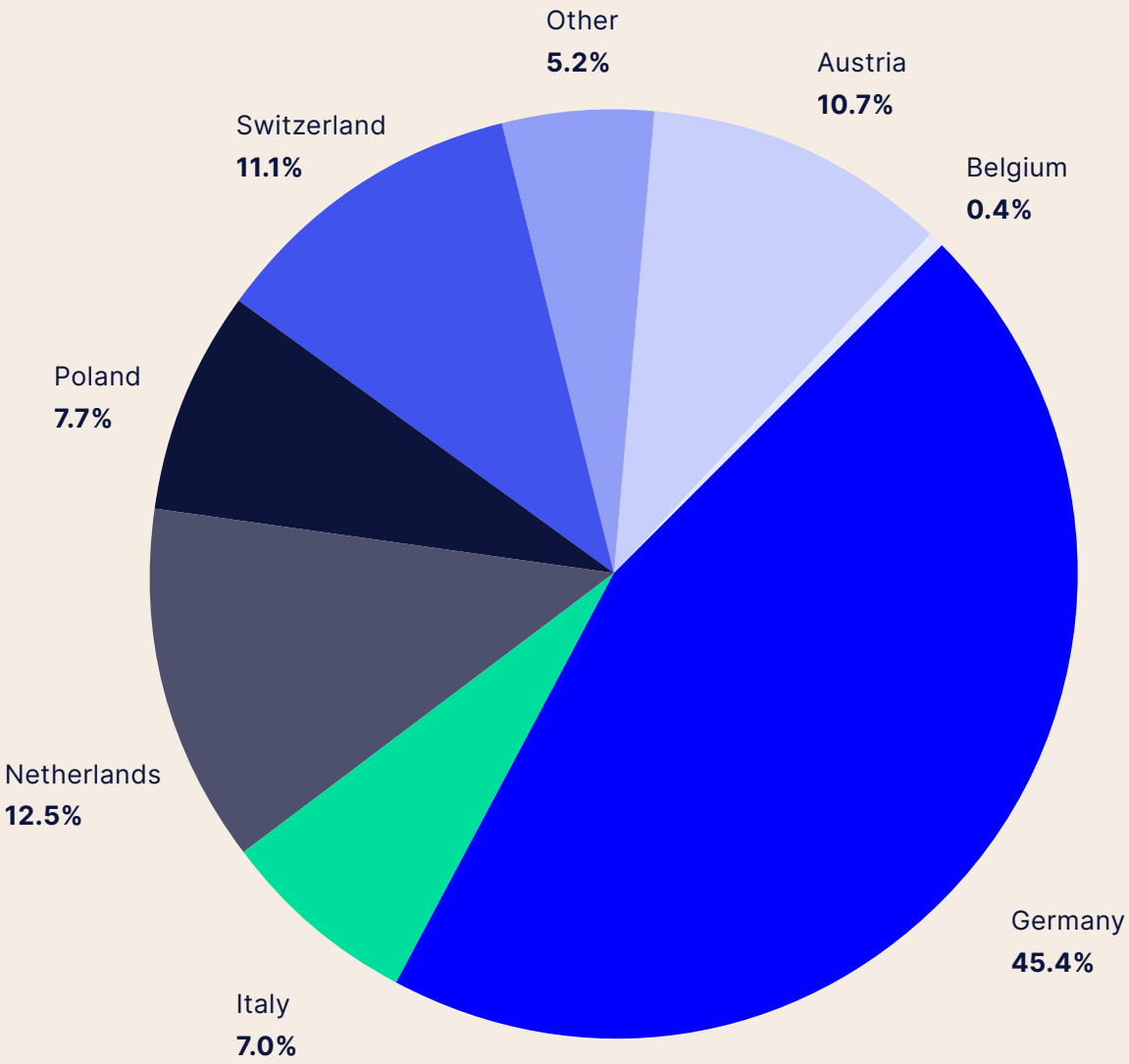
Industry and regional overview

To ensure a broad representation of the industry, Forto collected responses in various industries. Leading the demand, the Retail and Consumer Goods sector accounts for 23.2%, underscoring the critical role of logistics in supporting the dynamic retail market. Other significant sectors include Logistics (11.4%), Industrial & Engineering (10.7%), and Automotive (8.9%), reflecting the foundational importance of logistics across diverse operational landscapes.

Nearly half of the respondents are based in Germany (45.4%), followed by the Netherlands (12.5%), Switzerland (11.1%), and Austria (10.7%).

In which of the following industries does your organization operate?




Other
5.2%
Austria
10.7%
Switzerland
11.1%
Belgium
0.4%
Poland
7.7%
Netherlands
12.5%
Germany
45.4%
Italy
7.0%

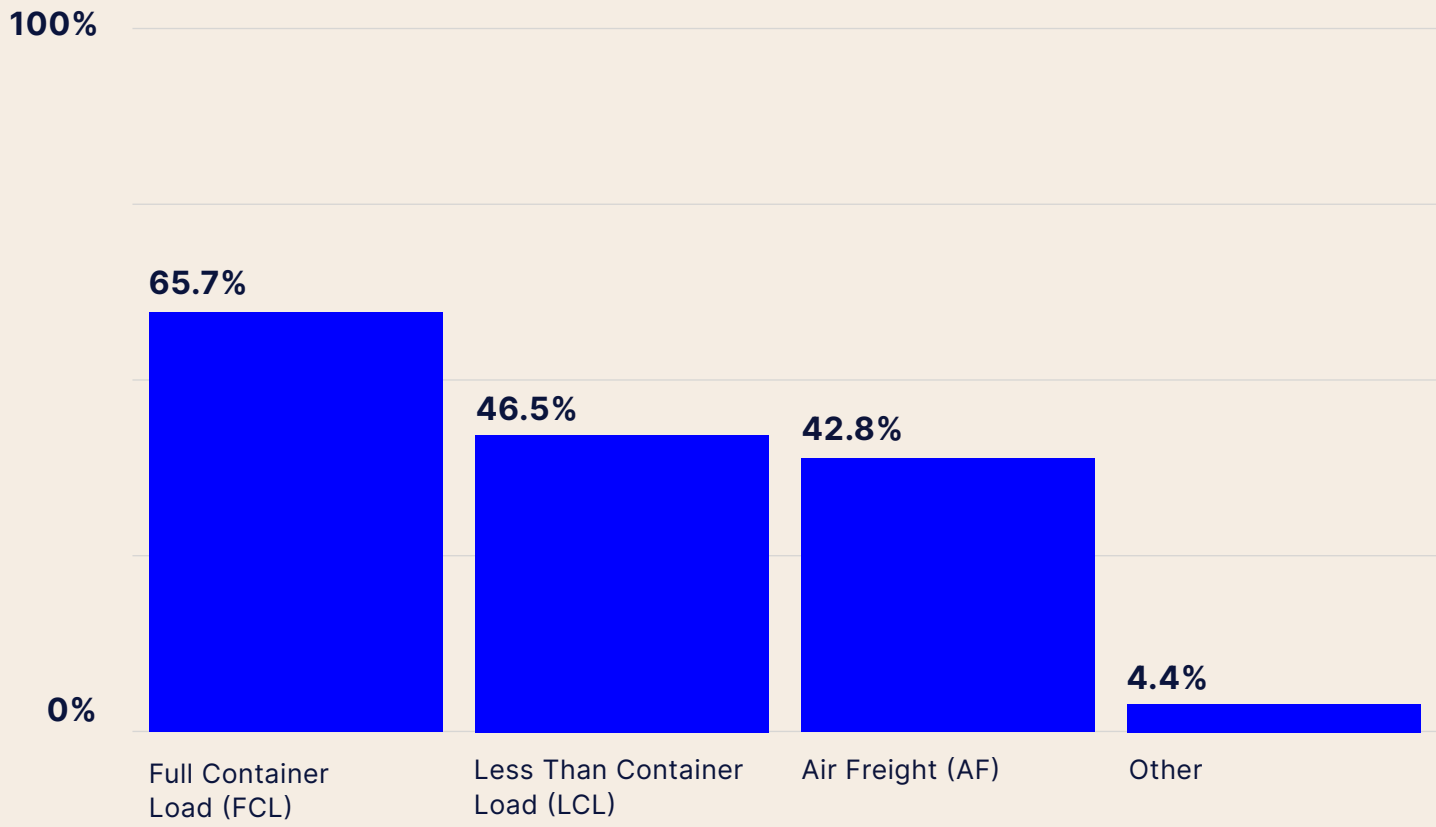
Scale and scope for overseas logistics operations

Forto also evaluated the organisation's specific cargo needs to gauge logistics preferences within the global trade environment.

The survey data on modes of transportation for overseas export/import in 2023 reveals a diverse utilization of shipping methods, providing insights about the scale and scope of our respondents' logistics operations.

These metrics help illustrate the diverse shipping needs and capacities of businesses engaged in international trade, offering a clearer understanding of the logistics industry's dynamics and the strategic shipping decisions made by companies.

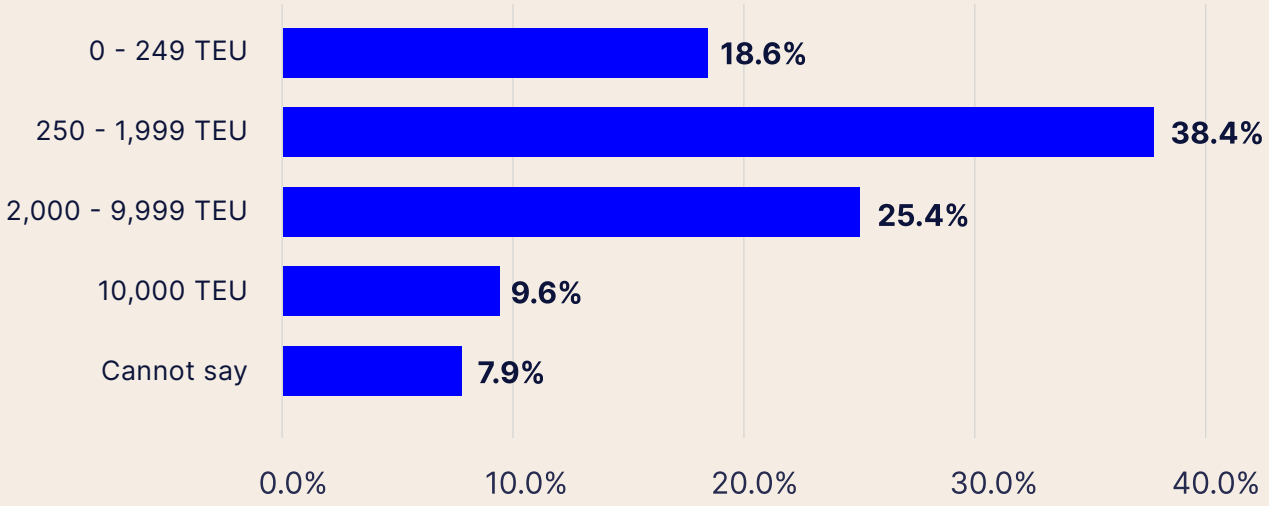
Which modes of transportation for overseas export/import did your organization use in 2023?



Full Container Load (FCL)

The most popular mode, used by 65.7% of respondents, indicates a strong preference for shipping large volumes of goods in containers. This method is favored for its cost-effectiveness and efficiency in handling significant quantities of merchandise. Notably, a significant portion of these shipments (38.4%), involved 250 to 1,999 TEUs, indicating robust activity at this scale.

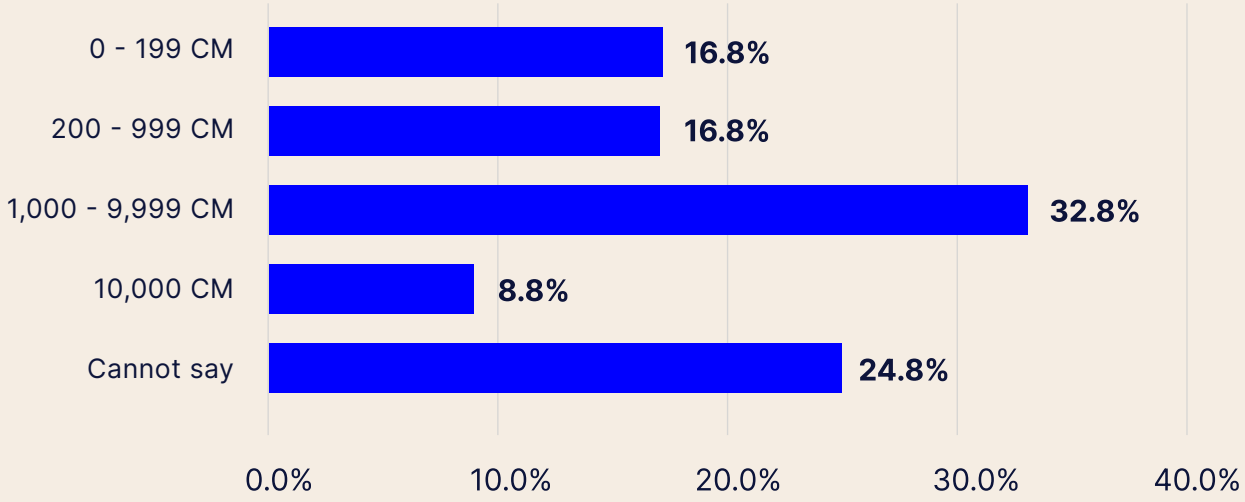
For FCL, how much TEU (twenty-foot equivalent unit) did your organization ship in 2023?



Less Than Container Load (LCL)

Utilized by 46.5% of respondents, LCL is preferred for smaller shipments that do not require a full container. This option offers flexibility for businesses with lower volume needs or those looking to reduce costs by sharing container space. The most frequent shipment volume indicated by participants for this specific transport mode was 1,000 - 9,999 CM.

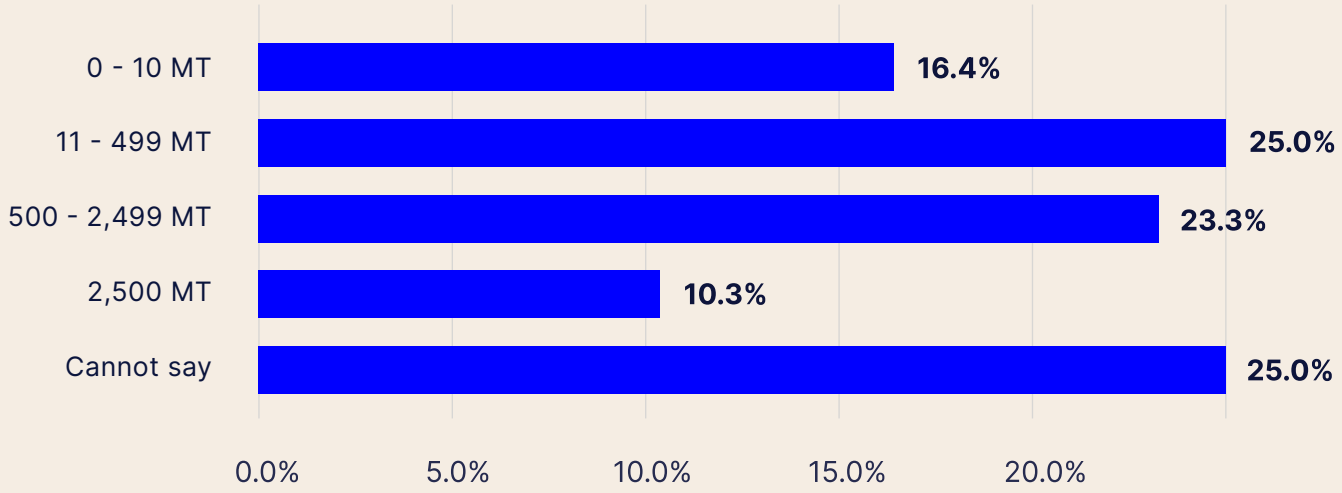
For LCL, how much CM (cubic-meter) did your organization ship in 2023?



Air Freight (AF)

Chosen by 42.8% of respondents, air freight is critical for time-sensitive shipments. Despite typically higher costs, it provides faster delivery times, which is essential for perishable goods or high-demand products needing rapid replenishment. The bulk of air freight shipments ranged from 11 to 499 metric tons, highlighting its role in moving significant quantities swiftly.

For AF, how much chargeable weight/tonnage did your organization ship in 2023?



Other Modes

A small percentage (4.4%) of respondents use other transportation methods, which might include bulk cargo ships, ferries, or specialized freight services depending on specific industry needs or geographic considerations.

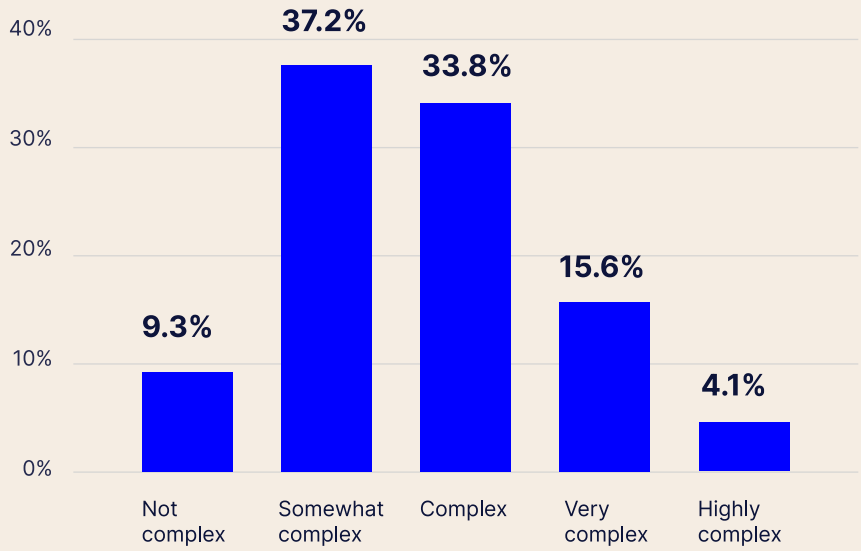
Scale and scope of logistics operations

Level of supply chain complexity

To better understand the state of logistics operations, Forto also evaluated two critical dimensions that determine supply chain management practices among organisations: supply chain complexity and supply chain digitalization.

Respondents report varying degrees of complexity in their supply chains. A significant portion (37.2%) perceives their supply chain as only somewhat complex, indicating a prevalent but manageable level of complexity in their operations. Additionally, 33.8% report their supply chains as complex, and 15.6% as very complex, suggesting that a substantial number deal with challenges that add layers of complexity.

How would you rate your organization's supply chain's complexity?

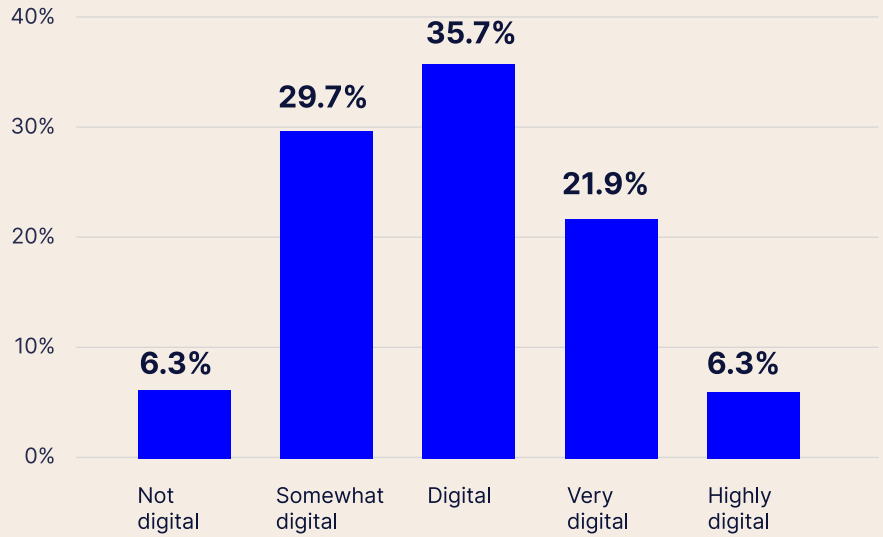


Level of supply chain digitalization

Regarding supply chain digitalization, the analysis shows a normal distribution. The majority of respondents are embracing digital transformation, with 35.7% describing their supply chains as digital, 21.9% as very digital and 6.3% as highly digital. However, 29.7% still see their supply chains as only somewhat digital, indicating ongoing efforts towards full digital integration.

The variables complexity and digitalization interact to define the operational landscape of logistics companies, influencing efficiency and decision-making processes. On the next pages of the report, Forto further investigated the challenges and trends that impact the operational landscape of logistics professionals.

How would you rate your organization's supply chain's digitalization?



Mapping the modern business landscape:

Key challenges and trends

The future of logistics is being actively forged by technological advancements and pressing global demands from the past years. The next pages examine the developments of the past years and pinpoint the challenges and trends perceived as most impactful by industry organizations today.

The global business landscape has experienced a decade of profound and accelerating change, transitioning from an era of relatively stable growth patterns to one defined by heightened volatility and complexity. While digitalization began reshaping industries early on, the past ten years have seen its pervasive integration into nearly every facet of operations, customer engagement, and strategic planning, with technologies like AI emerging as powerful new forces. Simultaneously, the nature of globalization itself has transformed; traditional cross-border trade in goods has encountered friction from geopolitical tensions and protectionist policies, even as digital flows of data, services, and communication have surged, creating a more interconnected yet fragmented world.

This period also saw sustainability evolve from a niche concern into a critical strategic imperative. Driven by increasing regulatory pressure, investor demands (ESG criteria), and heightened consumer awareness, embedding environmental and social considerations is now essential for risk management and long-term value creation. Furthermore, significant disruptions, notably the COVID-19 pandemic and subsequent widespread supply chain shocks, exposed systemic vulnerabilities and acted as catalysts, accelerating many pre-existing trends like digital adoption and supply chain regionalization.

These powerful, intersecting forces – rapid technological advancement, shifting global trade and political dynamics, the sustainability mandate, and major systemic disruptions – collectively shape the demanding operating environment businesses face today. Understanding this backdrop is essential, as it directly generates the core challenges explored in this report: intense competitive pressures, escalating customer expectations, pervasive economic uncertainty, the ongoing demands of digital transformation, and persistent supply chain fragility. Navigating this requires unprecedented levels of agility, resilience, and strategic foresight, particularly for professionals managing the intricate logistics and supply chains that underpin global commerce.

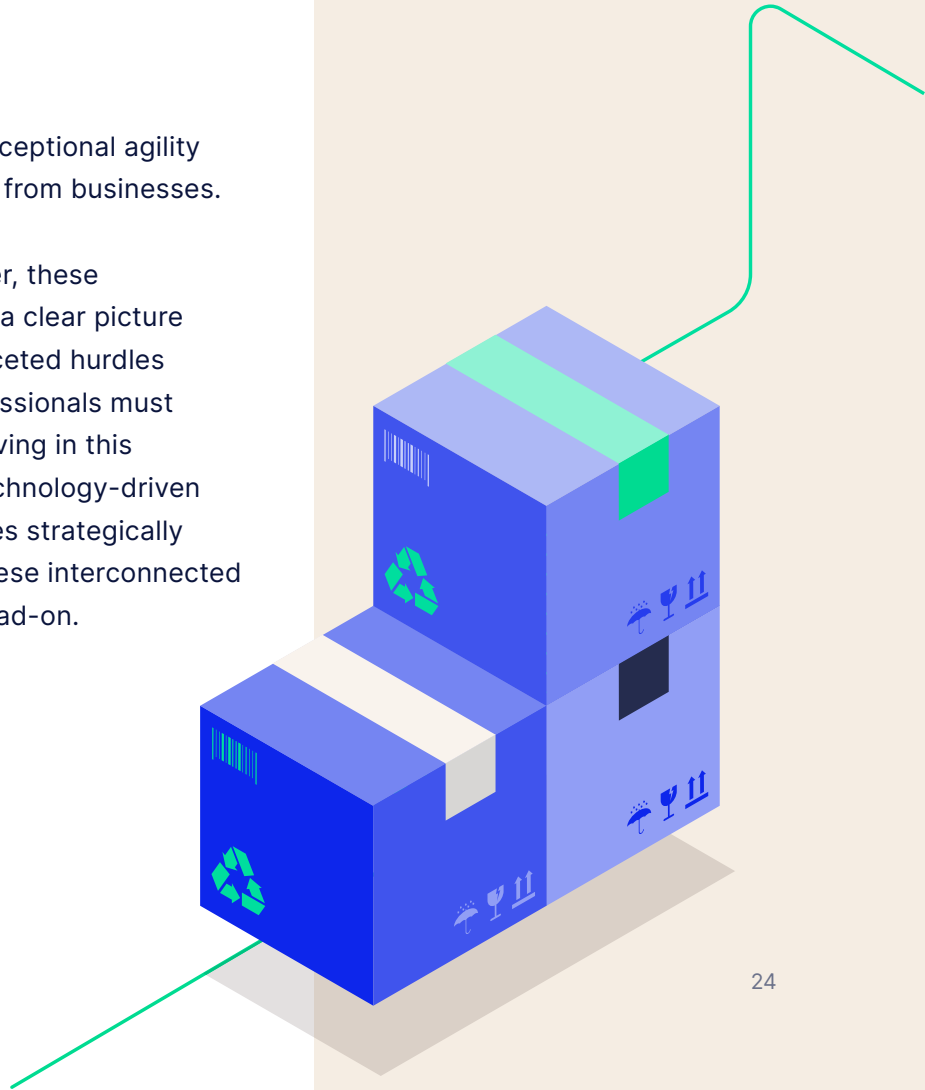
Competition, customers, and complexity: Exploring today's hurdles

Operating successfully within today's rapidly evolving business landscape necessitates a clear understanding and adept management of its inherent challenges. Our findings reveal the most significant pressures currently faced by professionals.

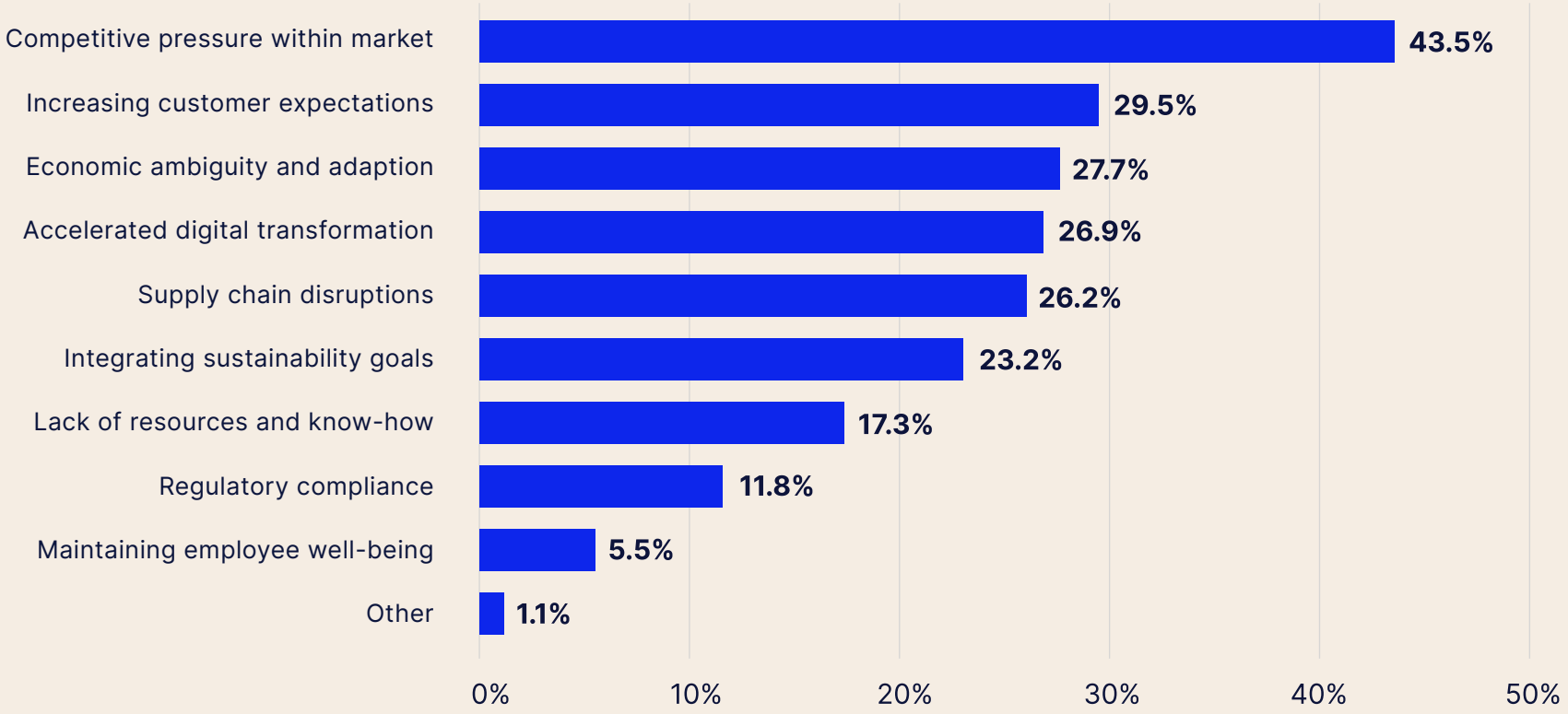
Foremost among these is the intense competitive pressure within the market, cited by a leading 43.5% of respondents. This underscores the relentless drive required to maintain market standing and foster continuous innovation. Compounding this pressure are increasing customer expectations (29.5%), reflecting the significant challenge organizations face in satisfying a more informed, demanding, and empowered customer base.

Further illustrating the complex operating environment, particularly for those in logistics and supply chain management, are several closely ranked concerns: economic uncertainty and the need for adaptation (27.7%), the pace of accelerated digital transformation (26.9%), and the ongoing impact of supply chain disruptions (26.2%). These factors collectively highlight the volatile conditions demanding exceptional agility and resilience from businesses.

Taken together, these findings paint a clear picture of the multifaceted hurdles logistics professionals must navigate. Thriving in this globalized, technology-driven market requires strategically addressing these interconnected challenges head-on.



What have been the biggest challenges in 2024 for your organization in supply chain management, purchasing, or related functions?



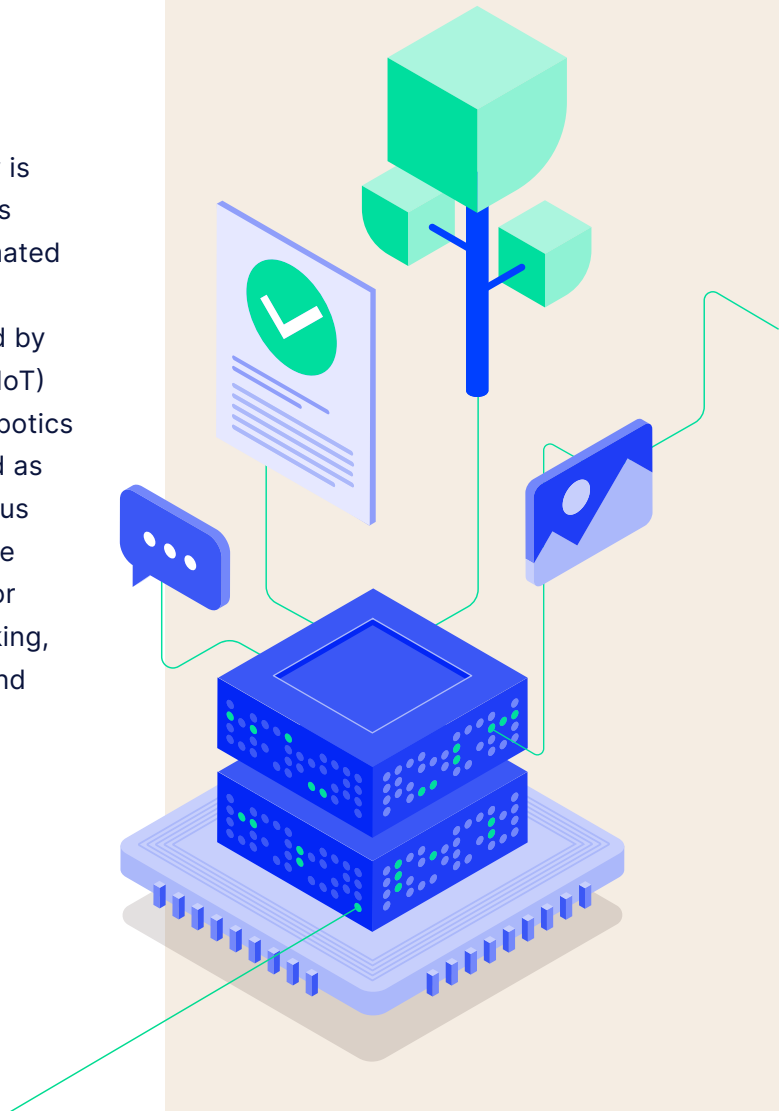
AI, sustainability, and data defining future evolution

While precise future prediction remains elusive, distinct trends are clearly emerging that signal a profound transformation within supply chain management and logistics, propelled by both technological innovation and evolving global pressures. Our analysis pinpoints the areas anticipated to have the most significant future impact.

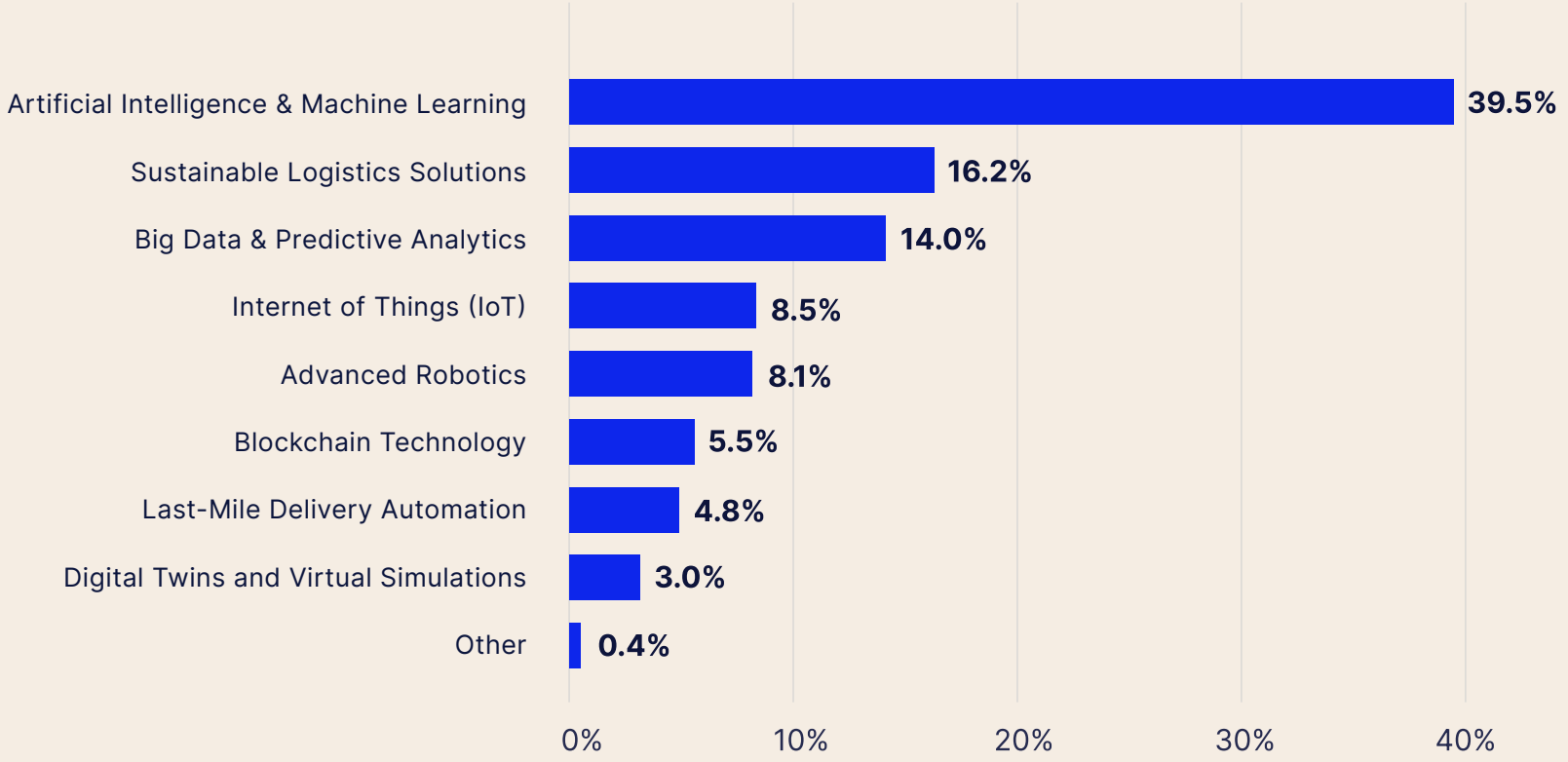
Dominating the landscape is Artificial Intelligence (AI) and Machine Learning (ML). Nearly 40% of survey participants pinpointed these technologies as the most impactful trend, underscoring a widespread recognition of their potential to revolutionize efficiency, guide strategic decisions, and drive innovation across the supply chain.

Alongside technological advancement, Sustainability has become a critical consideration. As global trade volumes reach unprecedented levels, balancing growth with environmental stewardship is paramount. Reflecting pressure from both regulators and consumers, 16.2% of respondents identified sustainable logistics solutions as a top future trend.

Furthermore, the industry is decisively moving towards more informed and automated operations. Big Data & Predictive Analytics (cited by 14%), Internet of Things (IoT) (8.5%), and Advanced Robotics (8.1%) were all highlighted as impactful trends. This focus demonstrates a clear drive to integrate technology for data-driven decision-making, enhanced connectivity, and operational automation, enabling organizations to respond proactively in a tech-driven market.



Which trend is most likely to have the greatest impact on your organization in the future?



Assessing the state of AI

Estimated impact and benefits, adoption status, and challenges

As stated in the previous section, AI is at the forefront of trends expected to change our way of working in the upcoming years.

On the next pages, the insights from the Forto Logistics Trend Compass survey reveal current perspectives among logistics professionals regarding Artificial Intelligence, covering its estimated impact, potential benefits, the adoption status, and use cases, as well as challenges.

The findings highlight a notable divergence: while AI's transformative potential is widely acknowledged, levels of adoption and familiarity vary considerably.

“

The insights in this report show a clear signal from the industry: AI is expected to tackle the chronic problems of the industry, eliminating legacy and inefficient IT solutions.

At Forto, we see its greatest value in enhancing the speed, accuracy, and transparency of the service we provide to our customers - powered by one of the strongest data foundations in the market. This report confirms what we’re hearing from our customers: the future isn’t just digital, it’s intelligent.

— Kamil Rodoper,
Chief Product & Technology Officer, Forto

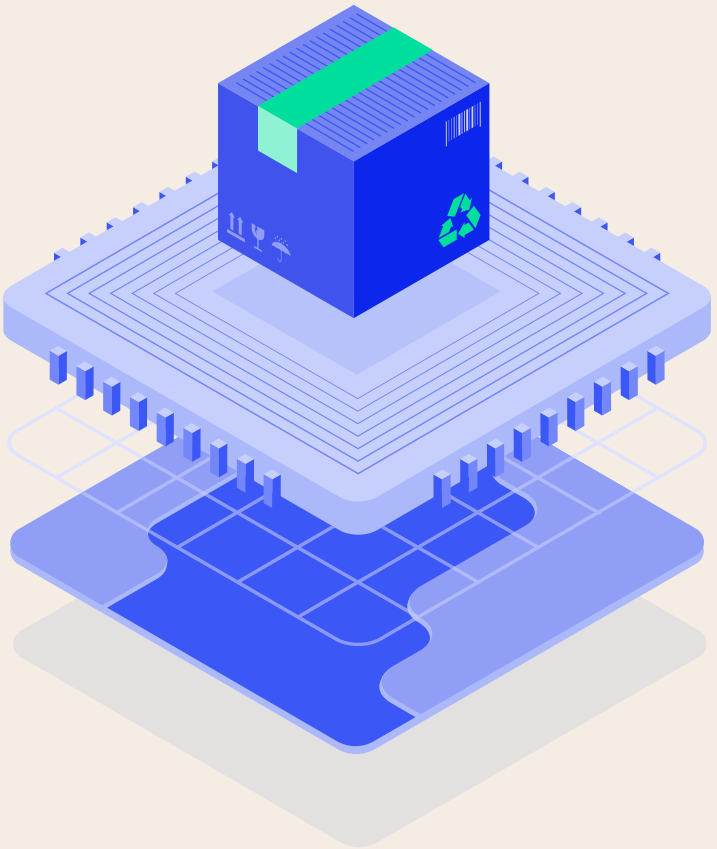
Estimated impact of AI on industries and supply chains

As described in the previous section, AI and ML technologies are expected to be the most transformative trend in the upcoming years. But what is the level of impact that professionals expect – both for their industries and Supply Chain Management?

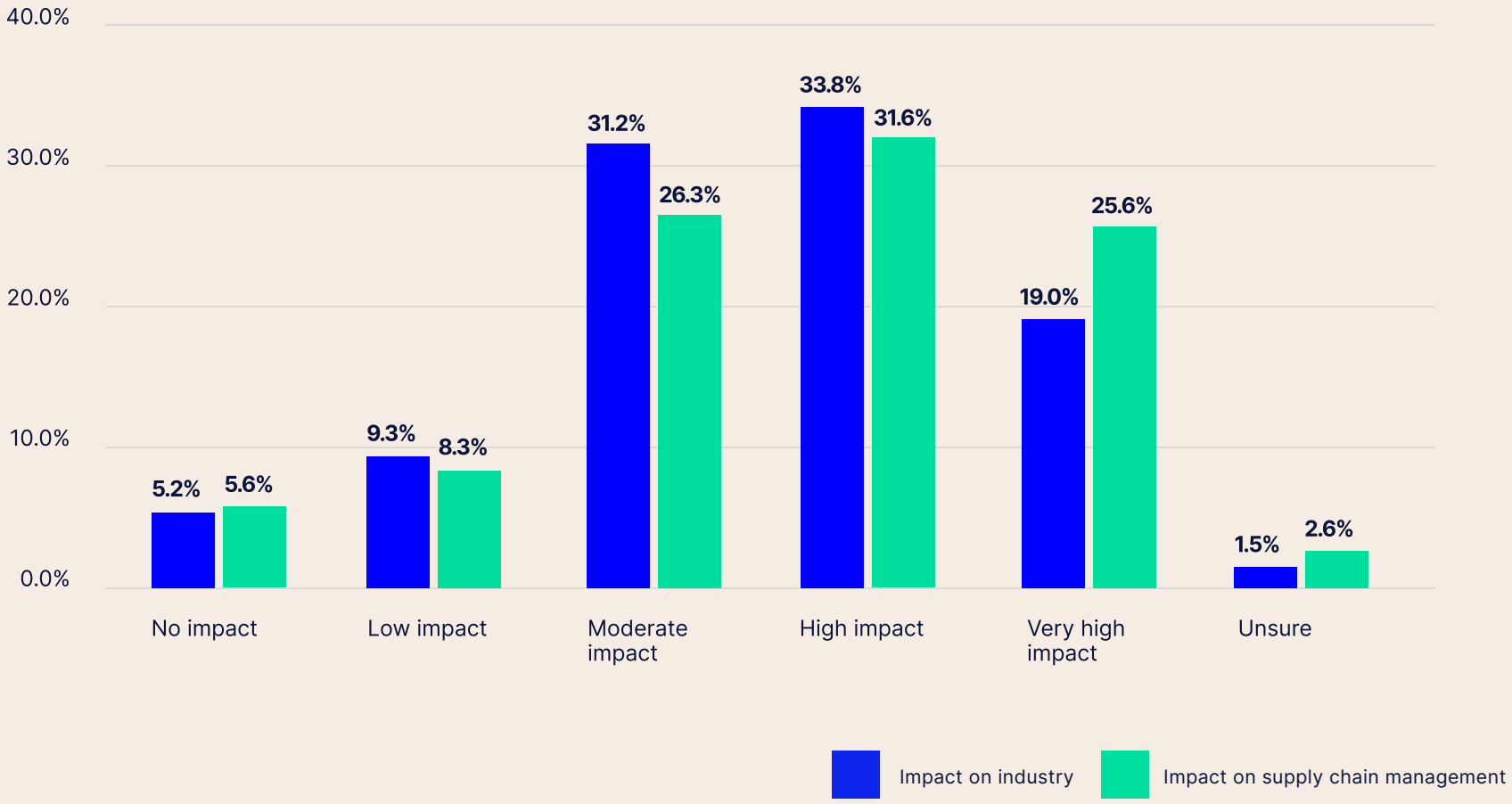
Survey responses indicate a strong consensus regarding the transformative potential of AI technologies, both within respondents' specific industries and in supply chain management broadly. Over half (52.8%) anticipate AI having a high or very high impact on their overall industry within the next five years, recognizing its capacity to drive significant improvements in efficiency, innovation, and competitiveness through applications ranging from automation to predictive analytics.

Focusing specifically on supply chain management, an even larger share (57.2%) expects AI technologies to exert a high or very high impact. This underscores a firm belief in AI's crucial role for optimizing operations, enhancing decision-making, and improving overall supply chain performance.

These high expectations suggest widespread preparation for significant operational shifts.



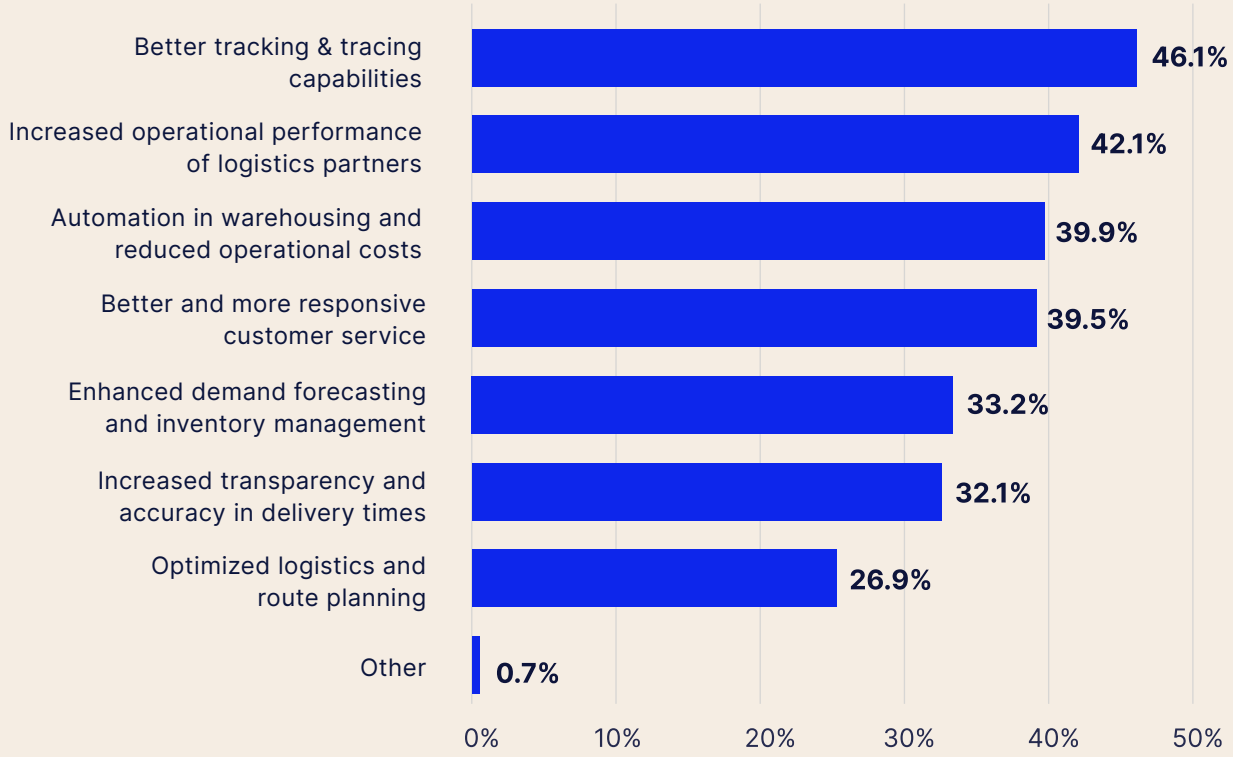
Which level of impact do you anticipate AI will have over the next five years?



Drilling down, the Forto Logistics Trend Compass 2025 also explored the wide opportunities that can be unlocked through the usage of AI to enhance logistics operations and supply chain management.

Better tracking and tracing capabilities lead the list of AI benefits, cited by almost half of the respondents (46.1%), highlighting AI's role in enhancing shipment visibility. Increased operational performance of logistics partners (42.1%), as well as automation in warehousing and reduced operational costs (39.9%), emphasize the potential of improving efficiency through AI technologies.

Which benefits do you see in the use of artificial intelligence to enhance logistics operations and supply chain management?

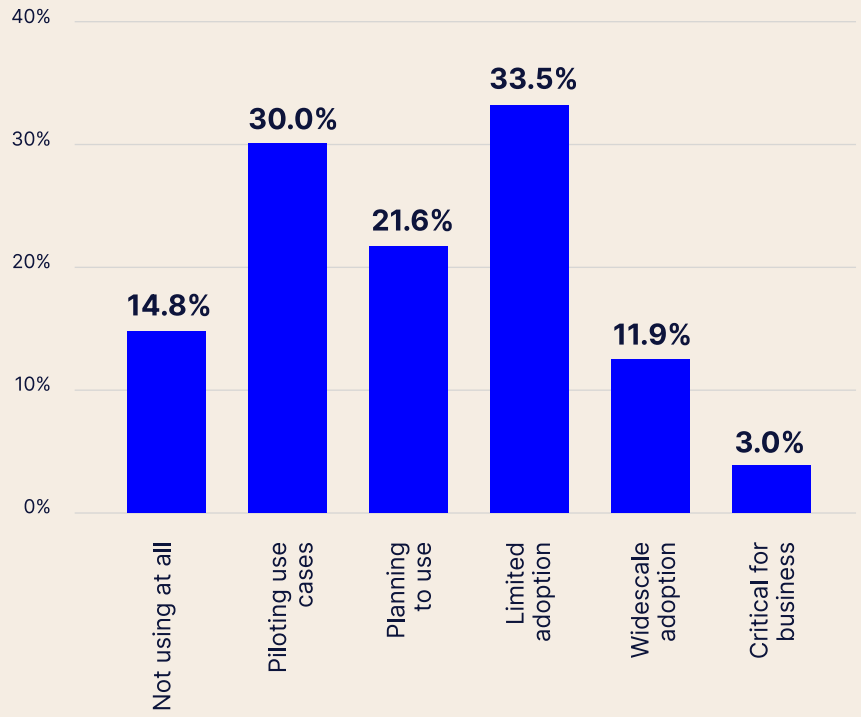


AI implementation: Current state and use cases

The estimated impact of AI technology is high, perceived benefits are broad – but what is the status of actual implementation? And what are the specific use cases identified by companies?

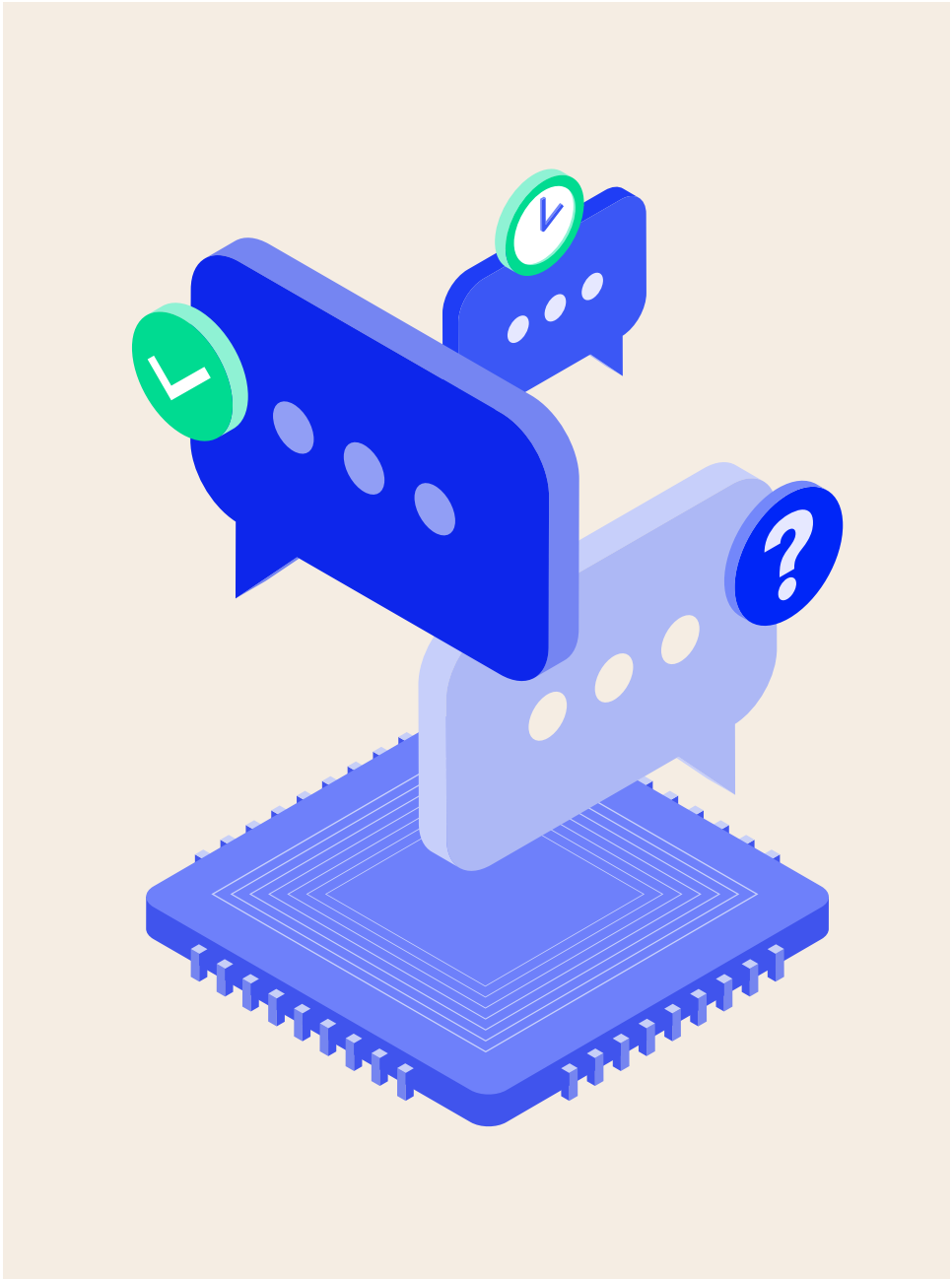
Regarding the practical reality of AI implementation, a gap between perceived benefits and implementation can be observed. Only 11.9% of organizations reported widescale AI adoption, and just 3.0% classify AI tools as critical for their business today. The majority are proceeding cautiously: 30% reported currently piloting specific use cases, 21.6% are planning to use AI and 33.5% report limited adoption, indicating an ongoing journey toward mature integration of AI within logistics. These findings underscore that while conviction in AI's potential is high, achieving full-scale, effective integration remains an ongoing endeavor

How have you implemented any AI powered tools or software in supply chain management, purchasing, or related functions?



Looking further into the specific use cases, chatbots for customer support, as noted by 45.5% of respondents, represent the most popular AI application, reflecting a shift towards automating customer interactions to provide timely and efficient service. This is closely followed by automated order entry and document processing, with 38.6% and 37.3% adoption, respectively, which streamline administrative tasks and improve data accuracy.

Inventory management and fulfillment optimization, utilized by 30.9% and 25.8% of respondents, respectively, demonstrate AI's capability to refine inventory control and logistics planning. AI's role in demand forecasting and route optimization, highlighted by 23.2% of participants, illustrates the impact on making supply chain operations more predictive and agile. These technologies enable companies to anticipate market demands, optimize stock levels, and plan efficient delivery routes, thereby reducing costs and improving service delivery.



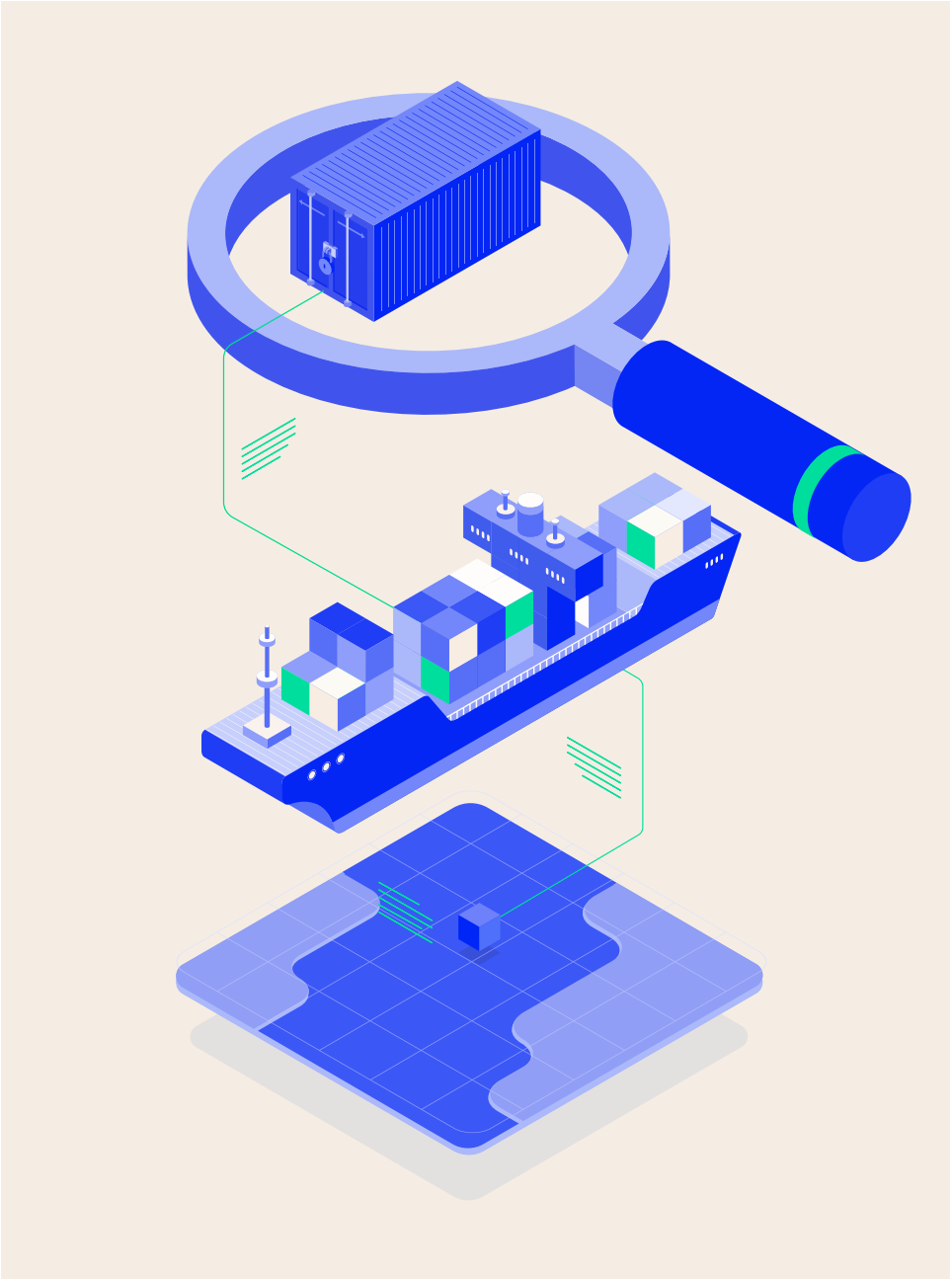
For which use cases are you currently utilizing or planning to use artificial intelligence in supply chain management, purchasing, or related functions?

Overcoming barriers, unlocking potential

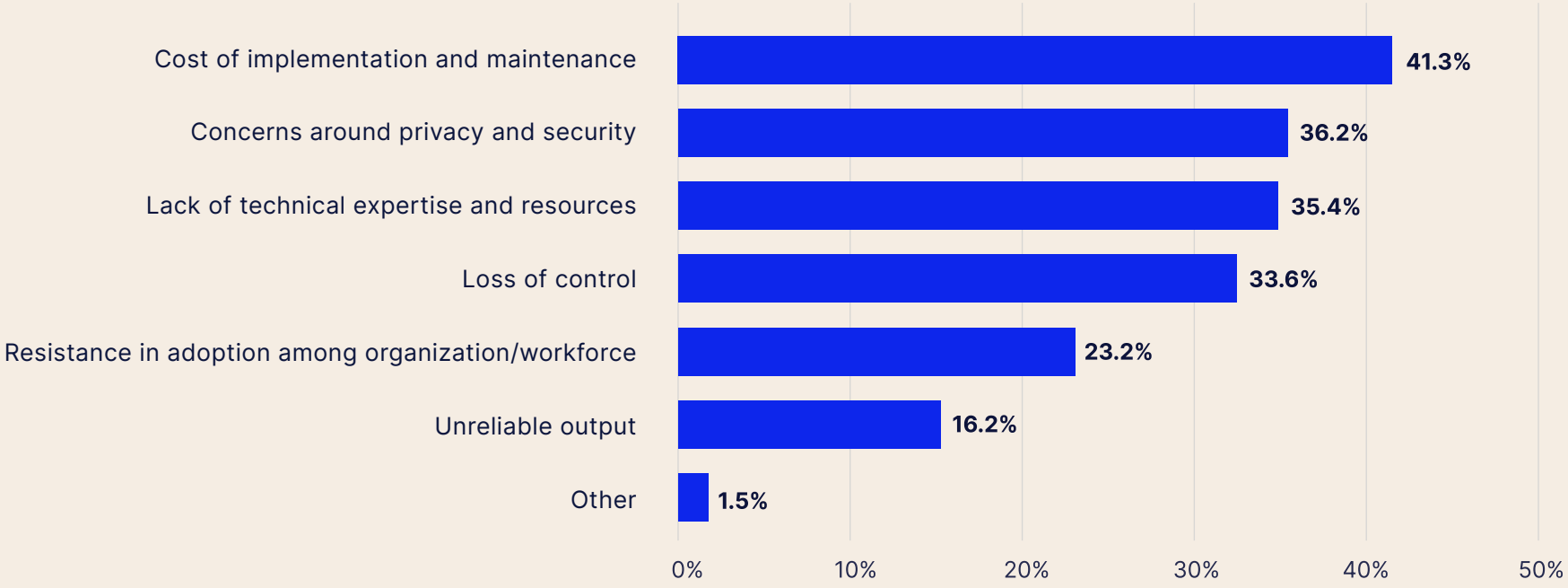
As indicated earlier, most organizations are still in the early stages of integrating AI-powered tools within their logistics operations. Forto set out to explore the specific challenges organizations are facing in the adoption of AI.

The leading concern when it comes to AI adoption is cost: 41.3% of respondents cite implementation and maintenance expenses as barriers. Privacy and security worries are also top of mind, noted by 36.2% of respondents, emphasizing the importance of safeguarding sensitive data and ensuring compliance with regulations. Lack of technical expertise and resources affects 35.4%, indicating a need for skilled personnel and adequate infrastructure to support AI initiatives. Loss of control is a challenge for 33.6% of respondents, suggesting apprehension about relying on automated systems for critical decision-making processes.

The multifaceted challenges underscore the critical need for strategic planning and resource investment to effectively integrate AI technologies and unlock their full potential in transforming logistics operations.



Which challenges do you see for your organization regarding the adoption of AI in supply chain management, purchasing, or related functions?



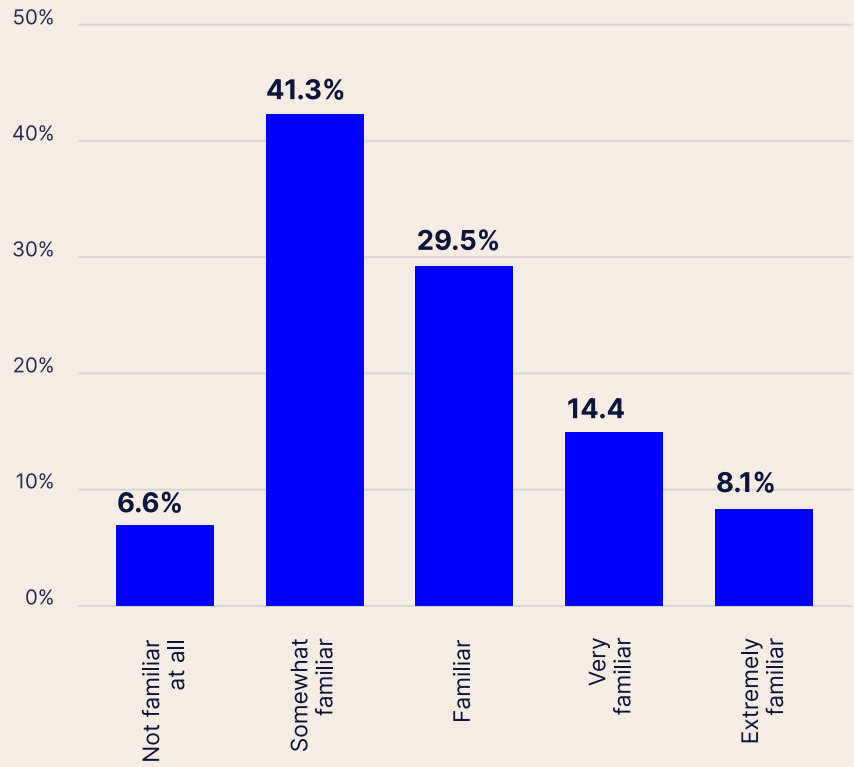
The AI knowledge gap

The challenges identified are strongly linked to knowledge in the field of AI technology.

Despite the strong confidence in AI's potential and the multitude of potential use cases and benefits, overall familiarity with the technology appears relatively limited. A substantial portion of respondents (41.3%) report being only 'somewhat familiar' with AI technologies, suggesting broad awareness often lacks deep understanding. Conversely, only 8.1% classify themselves as 'extremely familiar', likely representing the smaller contingent spearheading AI initiatives within their organizations.

This discrepancy highlights a clear need for enhanced education and training initiatives. Empowering more professionals to translate AI's recognized potential into practical application is essential. Closing this knowledge gap is crucial for fully unlocking AI-driven innovation and efficiency gains across business operations.

How familiar are you with AI technologies and their applications?

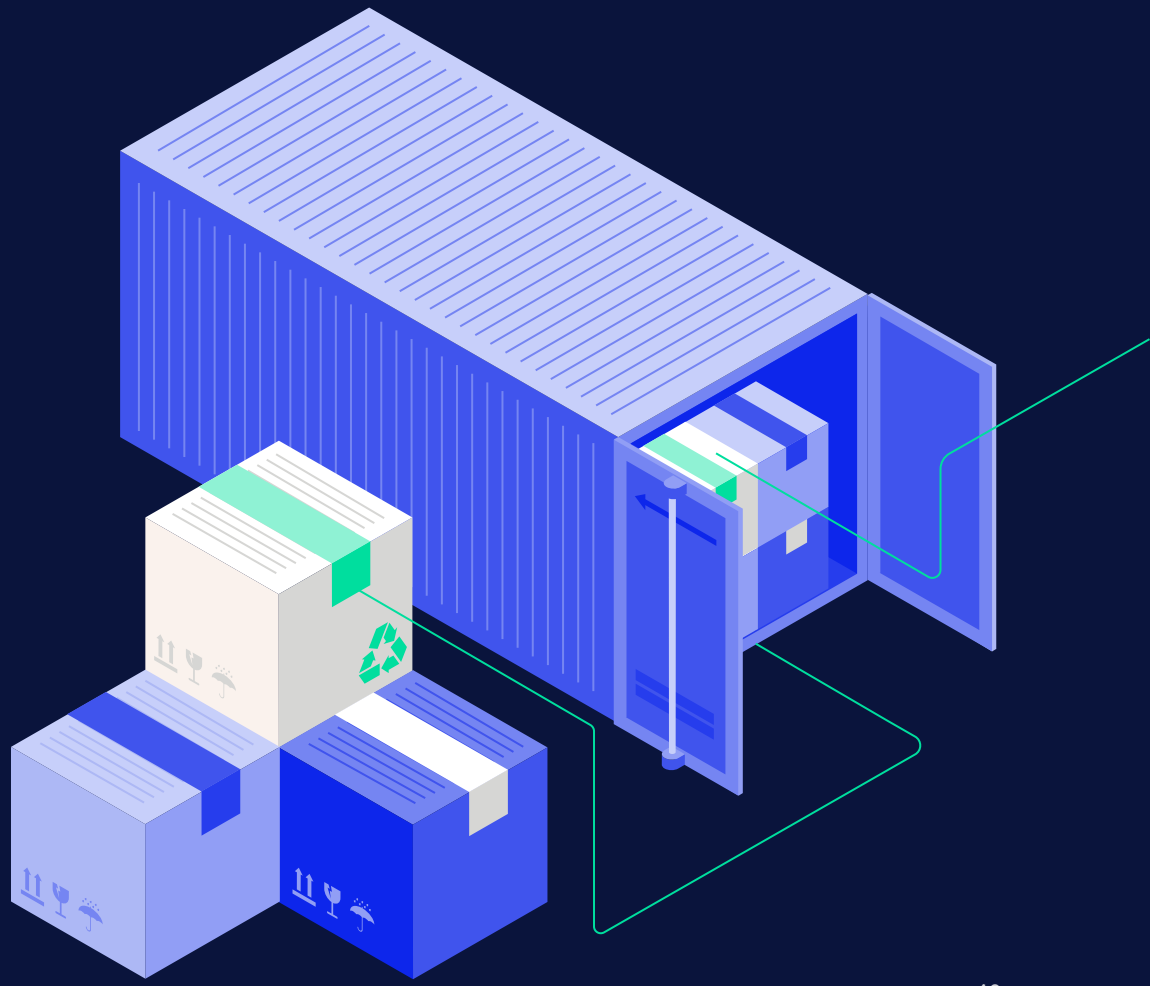


Excursion:

Shifting expectations in freight forwarding

The broader industry challenges, technological advancements like AI, and sustainability trends discussed throughout this report are directly influencing what clients now demand from their freight forwarding partners. As complexity grows, expectations move beyond basic transport towards strategic capabilities in visibility, resilience, and responsibility.

This shift fundamentally alters how forwarders must position themselves, making it vital to understand current client priorities. The following survey insights reveal the key criteria, excluding price, that shape freight forwarder selection today.

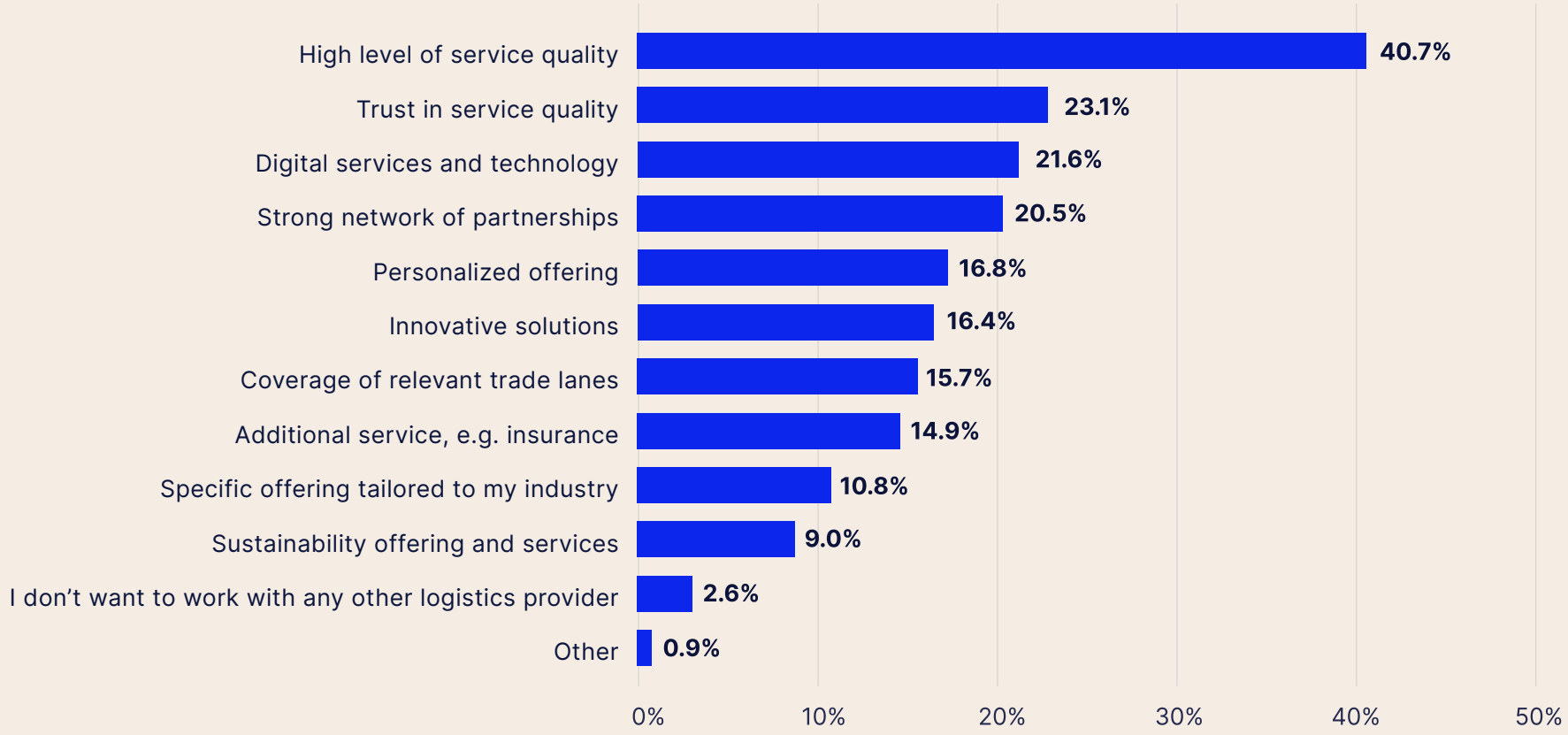


Service quality and technological innovation shape freight forwarder selection

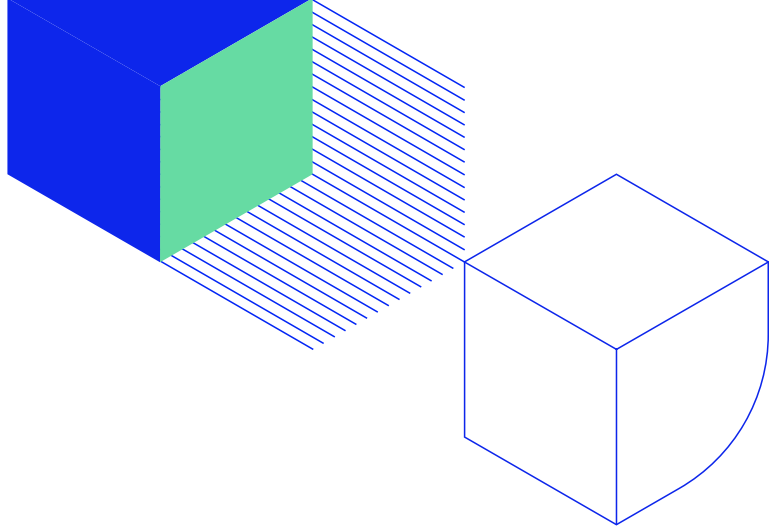
Our survey exploring expectations towards logistics providers, specifically within freight forwarding, reveals distinct priorities when pricing is excluded from the evaluation. Service quality emerges as the paramount criterion, underscored by 40.7% of professionals as their top priority when choosing a provider. This highlights the enduring importance placed on operational excellence and reliability in logistics partnerships. The significance of dependability is further reinforced by its strong link to customer loyalty, with trust in service quality being a key factor for 23.1% of respondents. However, the landscape is clearly evolving. Digital services and technology are rapidly gaining prominence, prioritized by 21.6% of respondents. This reflects a growing insistence on leveraging technology for enhanced visibility, efficiency, and communication within logistics operations. Complementing this technological push is a rising demand for personalized offerings and innovative solutions, indicating a move towards more customized and forward-thinking logistics partnerships. Notably, sustainability is also carving out its place as a decision factor, valued by 9% of respondents seeking environmentally conscious logistics practices.

Collectively, these preferences signal a clear message: while foundational service quality remains non-negotiable, the future trajectory for freight forwarders hinges increasingly on their ability to integrate advanced technology, deliver customer-centric and innovative solutions, and demonstrate a tangible commitment to sustainability.

Considering the same price - why would you prefer working with your preferred freight forwarder?



Wrapping up: An industry in transformation



This report underscores that the logistics and supply chain sector is navigating a period of significant transformation, characterized by intense market pressures, heightened customer expectations, and the relentless pace of technological change. While the challenges stemming from economic uncertainty, competitive dynamics, and ongoing disruptions are substantial, the findings presented here show a path forward, rich with potential for innovation and growth.

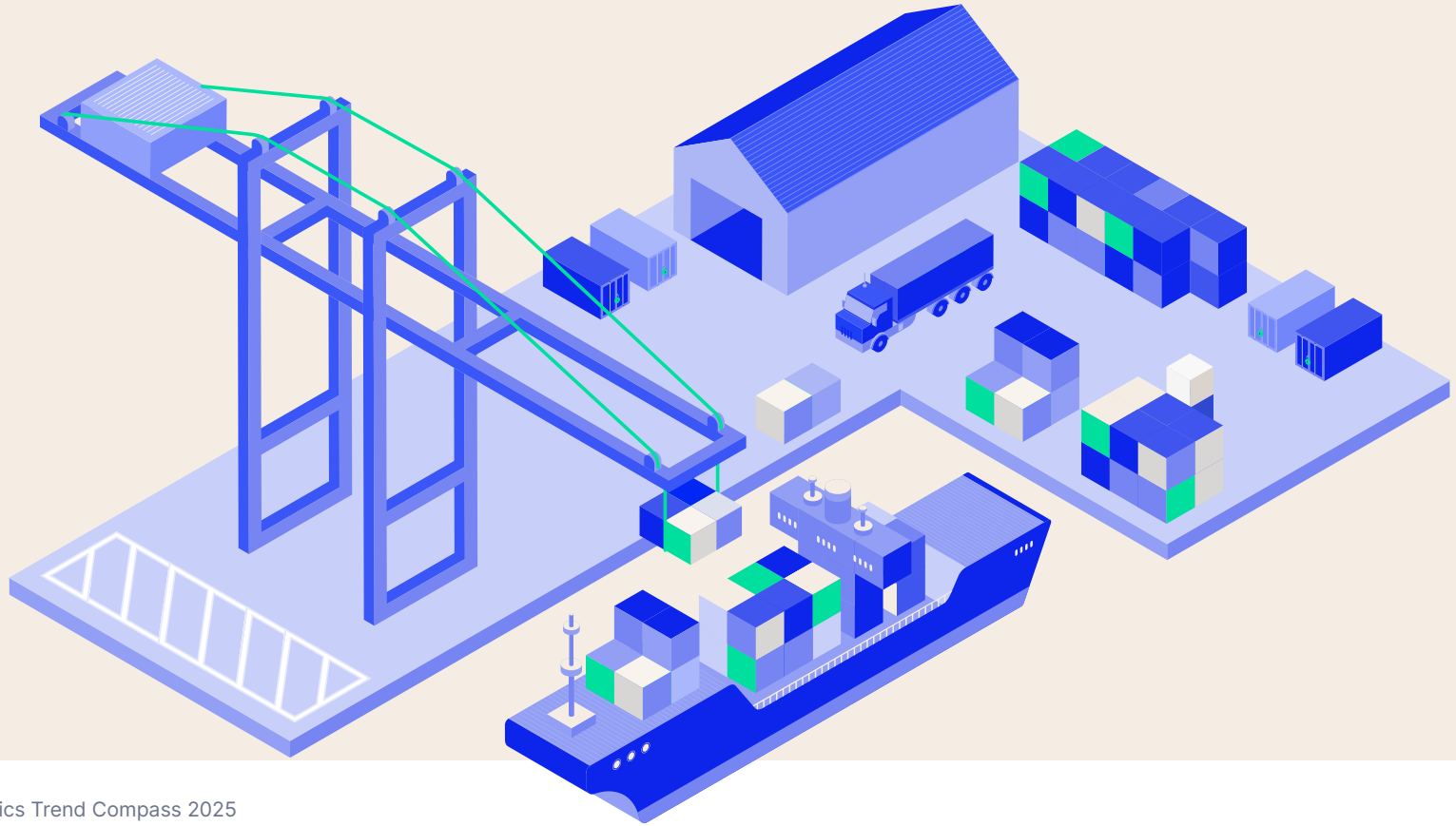
Central to this future trajectory is the impact anticipated from Artificial Intelligence. The recognition of AI's potential to improve efficiency, decision-making, and visibility is palpable. However, realizing these benefits necessitates a concerted effort to bridge the current gap between high expectations and practical, scaled implementation. Moving beyond pilot projects to strategic integration requires addressing hurdles related to cost, data security, and the cultivation of technical expertise within the workforce. Successfully navigating this transition will be key to unlocking new levels of operational performance and competitive advantage.

Simultaneously, sustainability is cementing its position as a core strategic element, driven by regulatory demands, stakeholder pressure, and a growing understanding of its role in long-term value creation and risk mitigation.

The future belongs to organizations that approach these dynamics proactively. It requires moving beyond reactive problem-solving towards intentionally shaping more intelligent, agile, and responsible supply chains. By strategically making use of technology like AI, embedding sustainability into operations, and fostering collaborative, value-driven partnerships, professionals and organizations can effectively navigate the complexities of today while building the resilient and efficient logistics networks required for tomorrow.

Are you still looking for a logistics partner that can help shape the future of your supply chain with you? We at Forto can help you navigate the complexities of logistics: Today and in the future. Providing freight forwarding services powered by the latest technologies, helping you stay up to speed.

If you would like to get in touch with us, just scan the QR code and fill out the form. We are looking forward to talking to you!



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by its Managing Director Guillaume Petit-Perrin with sole power of representation.
The Chairman of the Administrative Board of Forto SE is Michael Wax.