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Supply Chain Radar

# The State of Visibility 2024

Real-Time Shipment Visibility  
Emerges as a Key Component of  
Digital Transformation & Sustainability

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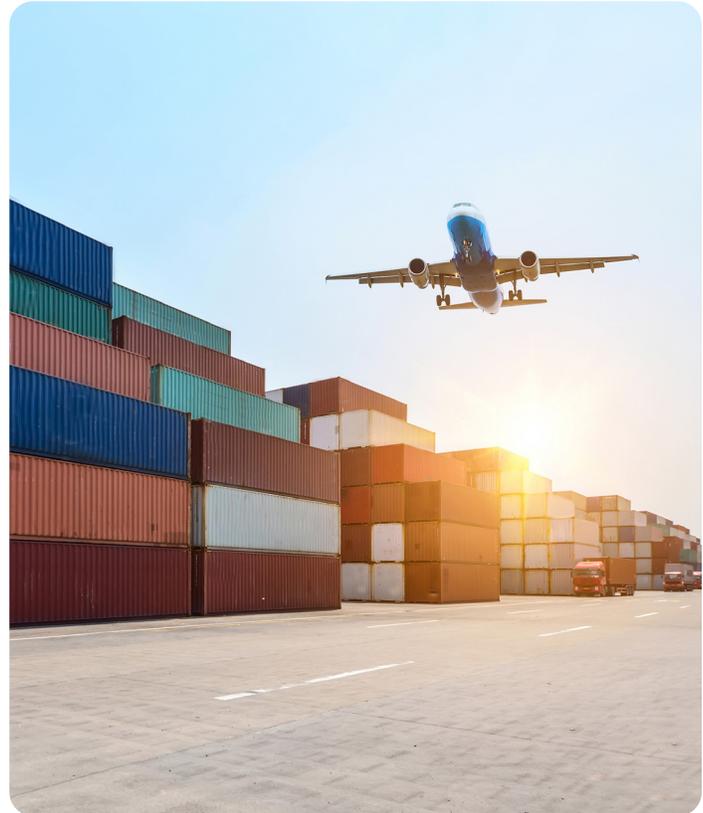
## EXECUTIVE SUMMARY

The “The State of Visibility 2024” survey, designed and executed by Charlie Pesti and Shipping & Freight Resource in partnership with Tive, provides crucial insights into the evolving landscape of supply chain operations and the growing imperative for real-time shipment visibility. Drawing from a diverse pool of industry professionals, the report underscores an escalating demand from customers across sectors such as logistics, pharmaceuticals, and retail for immediate tracking capabilities. This customer demand highlights real-time visibility’s transition from a value-added service to a fundamental customer expectation.

Despite the apparent benefits, including enhanced customer satisfaction and operational efficiencies, achieving effective real-time visibility poses some challenges. Respondents to this annual survey cited technological integration, data accuracy, and high implementation costs as primary hurdles. Yet, the advantages, such as improved decision-making, reduced costs, and more sustainable supply chain operations, highlight the importance of overcoming these obstacles.

The survey also reveals that shipment visibility is a critical element of companies’ broader digital transformation strategies, reflecting its vital role in enhancing supply chain agility and competitiveness. The experiences of 2023, particularly in navigating the complexities introduced by global disruptions (such as the Red Sea shipping attacks), have played a pivotal role in shaping 2024 priorities, emphasizing the value of real-time data and analytics.

“The State of Visibility 2024” paints a clear picture of the critical importance of shipment visibility within modern supply chain operations. As industries continue to evolve, the insights from this survey offer guidance on addressing challenges and leveraging opportunities to achieve unprecedented levels of supply chain transparency and efficiency.



## METHODOLOGY

The “State of Visibility 2024” survey delved into the intricacies of shipment visibility across the supply chain industry.

Aiming to uncover trends, challenges, and the overall demand for real-time shipment tracking, the survey collected responses from 244 supply chain professionals spanning various industry sectors from across the globe.



**244** survey respondents

Additional information about participant demographics, data collection methods, and the analytical approach employed can be found at the end of this report.



# LOOKING BACK AT 2023: THE EVOLUTION OF SUPPLY CHAIN VISIBILITY

## Major Trends & Challenges of 2023

The landscape of supply chain visibility in 2023 was marked by an increasing emphasis on resilience and agility, driven by the lingering effects of the COVID-19 pandemic and heightened by global supply chain disruptions.

The World Economic Forum highlighted the critical need for enhanced visibility and traceability within supply chains, identifying these elements as essential for building resilience. Despite this recognition, a substantial gap was observed in the adoption of advanced technologies for tracking and tracing, with many in the industry lagging in implementing effective visibility solutions.

## Comparative Analysis: 2023 vs. 2024

The transition from 2023 to 2024 has seen a notable shift in the perception of real-time visibility from a competitive advantage to a fundamental operational necessity. While nearly 80% of industry professionals recognized the importance of real-time visibility in both 2023 and 2024, the 2024 survey data reveals that only 53% of respondents are leveraging Internet of Things (IoT) trackers/devices for real-time shipment tracking. Notably, this is up from 25% in 2023, and this upward trend underscores a growing consensus on the indispensability of real-time visibility in meeting customer demands for transparency and operational efficiency.



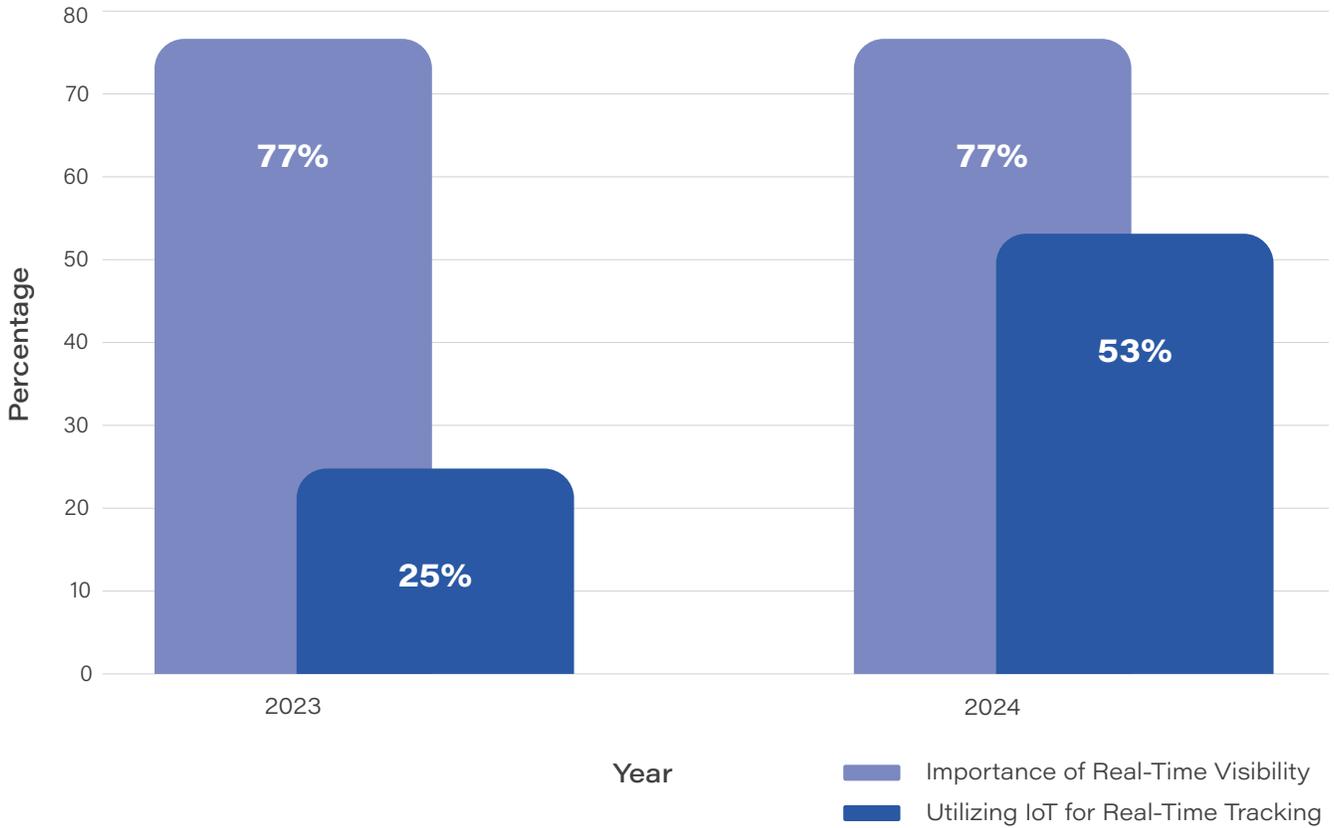
Nearly 80% of industry professionals recognize the importance of real-time visibility in 2024 (same as 2023).



2024 survey data reveals that only 53% of respondents are leveraging Internet of Things (IoT) trackers/devices for real-time shipment tracking.



### Shift in Utilization of Real-Time Visibility & IoT Tracking



### The Impact of Global Events

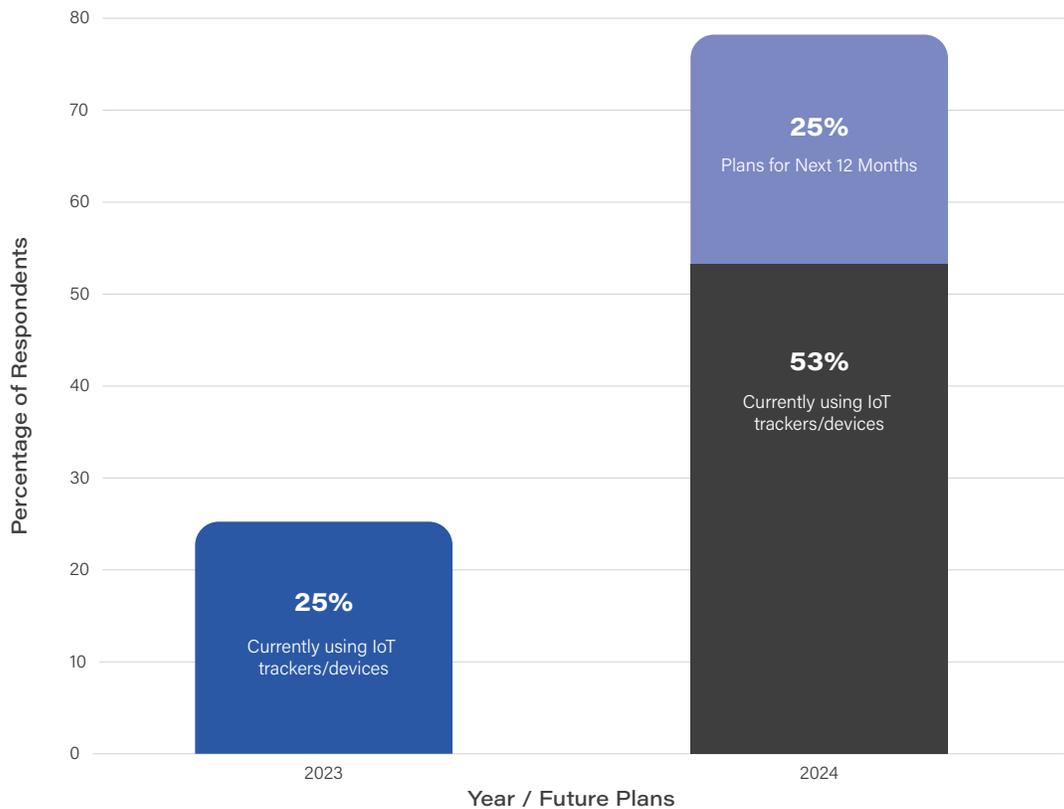
Global events, most notably the COVID-19 pandemic, have profoundly impacted supply chain strategies, underscoring the critical importance of real-time visibility in navigating uncertainties. These disruptions, and other more recent ones such as the Red Sea shipping attacks and a significant increase in cargo theft events around the globe, have accelerated the shift towards more agile, responsive supply chains, highlighting the necessity for real-time data to preempt and manage disruptions effectively.



## Technological Advancements & Adoption Rates

Reflecting on the technological landscape of 2023, only 25% of respondents were utilizing IoT trackers/devices for real-time shipment tracking. This contrast with the 53% adoption rate in 2024 signifies a robust growth in the adoption and integration of visibility solutions. An additional 25% of 2024 respondents indicate plans to adopt IoT trackers/devices within the next 12 months, further evidencing the industry’s move towards embracing transformative digital technologies to enhance supply chain visibility.

**Adoption of IoT Trackers/Devices for Real-Time Shipment Tracking**



The progression from 2023 to 2024 highlights a significant evolution in the supply chain visibility domain, with a marked increase in the adoption of IoT trackers/devices reflecting the industry’s commitment to overcoming previous challenges.

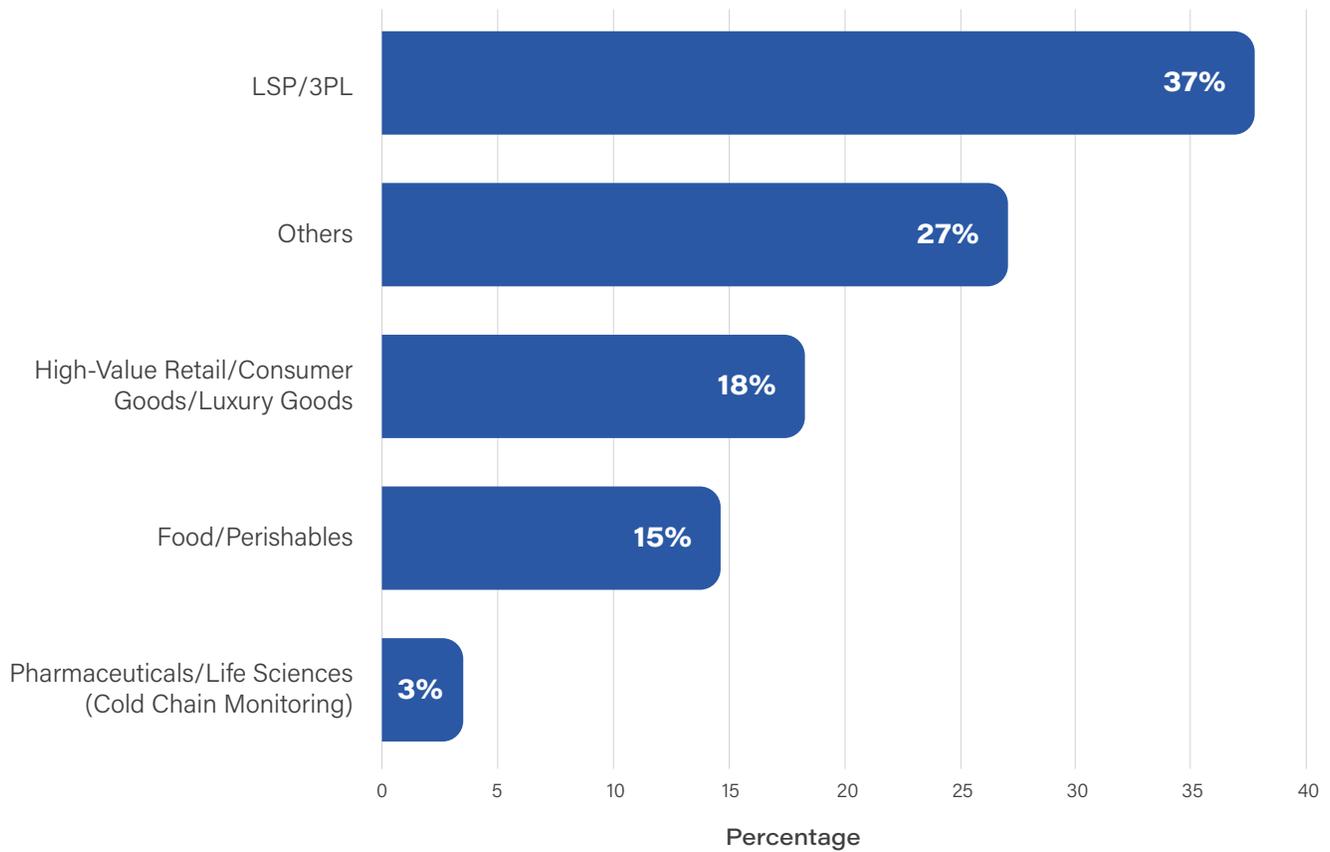
The comparative analysis and reflection on the past year underscore the vital role of technological advancements in shaping the future of supply chain operations, paving the way for a more transparent, efficient, and resilient supply chain ecosystem.

# SURVEY RESULTS & ANALYSIS

## Industry & Company Profile

**Distribution of Respondents by Industry:** survey respondents represent a diverse representation across industries, with Logistics Service Providers (LSP)/3PL leading at 37%, followed by high-value retail/consumer goods/luxury goods at 18%, and food/perishables at 15%. Other sectors include pharmaceuticals/life sciences for cold chain monitoring (3%).

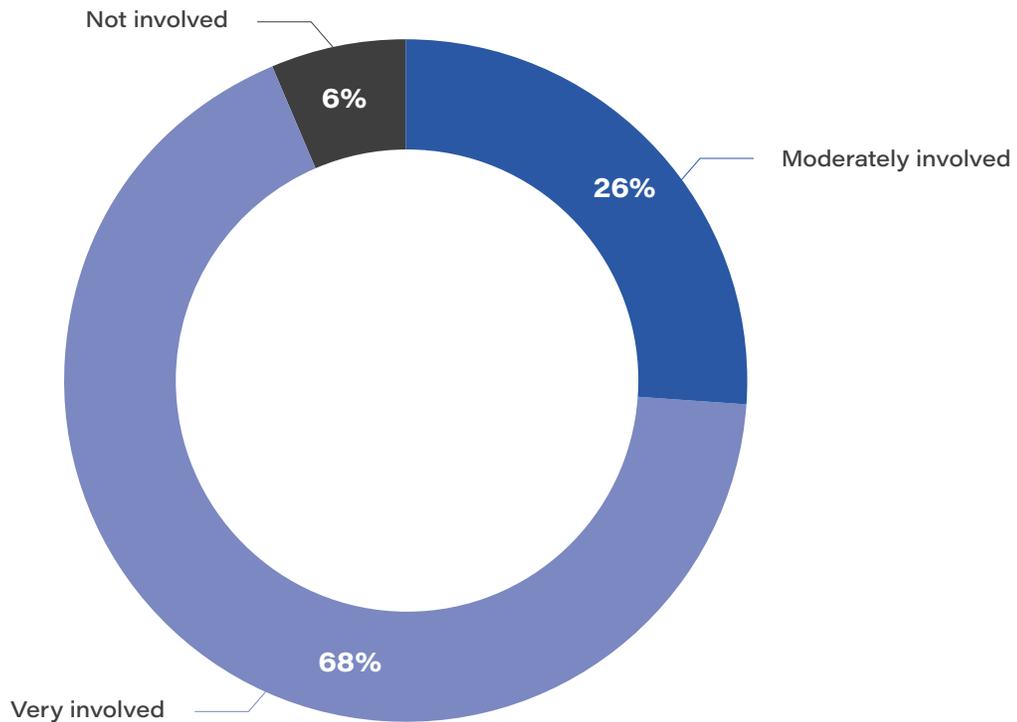
Industry Representation in Survey





**Level of Involvement in Supply Chain Operations:** A majority of respondents (68%) report being very involved in their company’s supply chain operations and shipment visibility, highlighting the importance placed on visibility within organizational roles. 26% are moderately involved, while a small fraction (6%) are not involved.

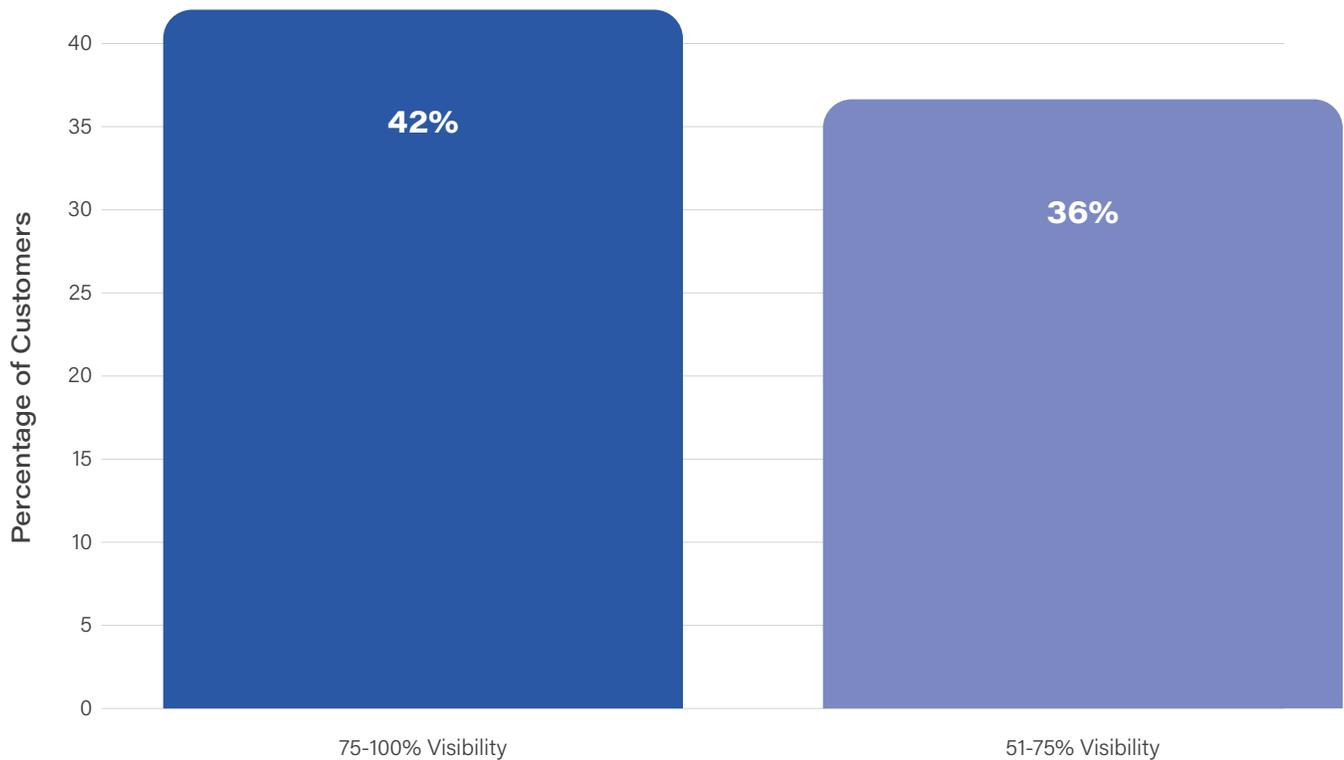
### Involvement in Supply Chain Operations & Shipment Visibility



## Demand for Real-Time Visibility

**By Industry:** The demand for real-time shipment visibility is notably high, especially within the Logistics Service Provider (LSP)/3PL sector. Here, 42% of customers are asking for 75-100% real-time visibility, followed by 36% of customers demanding 51-75% visibility. This underscores a strong market expectation for enhanced tracking capabilities across industries.

### Demand for Real-Time Shipment Visibility in LSP/3PL Sector



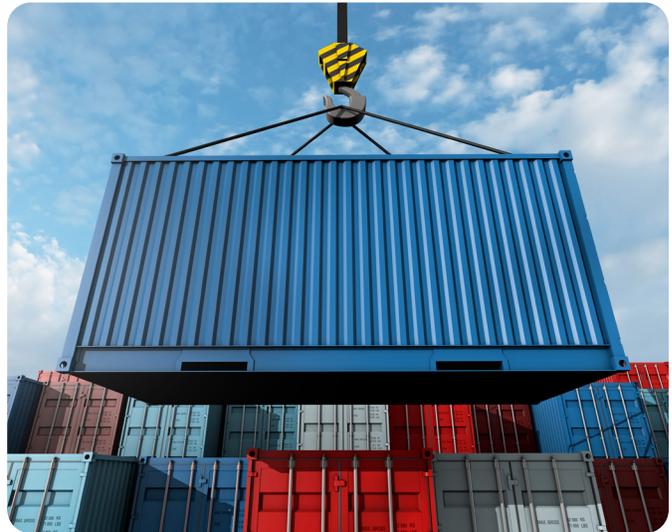
**Nearly Half of Respondents Lack Real-Time Visibility:** Despite the critical need for real-time shipment visibility, nearly half of the surveyed organizations have not yet adopted this technology. However, 77% acknowledge its indispensability, and 42% of customers demand 75-100% shipment visibility.

## Investment Priorities & Technology Adoption

**Primary Reasons for Investing:** Respondents identify **improving customer service**, **reducing operational costs**, and **enhancing supply chain efficiency** as the top reasons for investing in shipment visibility solutions. This reflects a strategic emphasis on not only meeting customer expectations but also on leveraging visibility for operational optimization.

**Cargo Losses Remain High:** An alarming 48% of respondents indicate monthly losses in the range of \$5,000 to \$10,000 due to damage or theft.

80% of respondents cite that security, loss prevention, and cross-border shipping challenges are driving their need for real-time shipment visibility.



**Technology Adoption:** IoT devices and Artificial Intelligence (AI) are among the most adopted technologies for enhancing visibility. 53% of companies currently leverage IoT trackers/devices (vs. 25% in 2023), indicating a significant uptick in the adoption of technology to facilitate real-time tracking and data analysis for decision-making.

## Benefits & Challenges

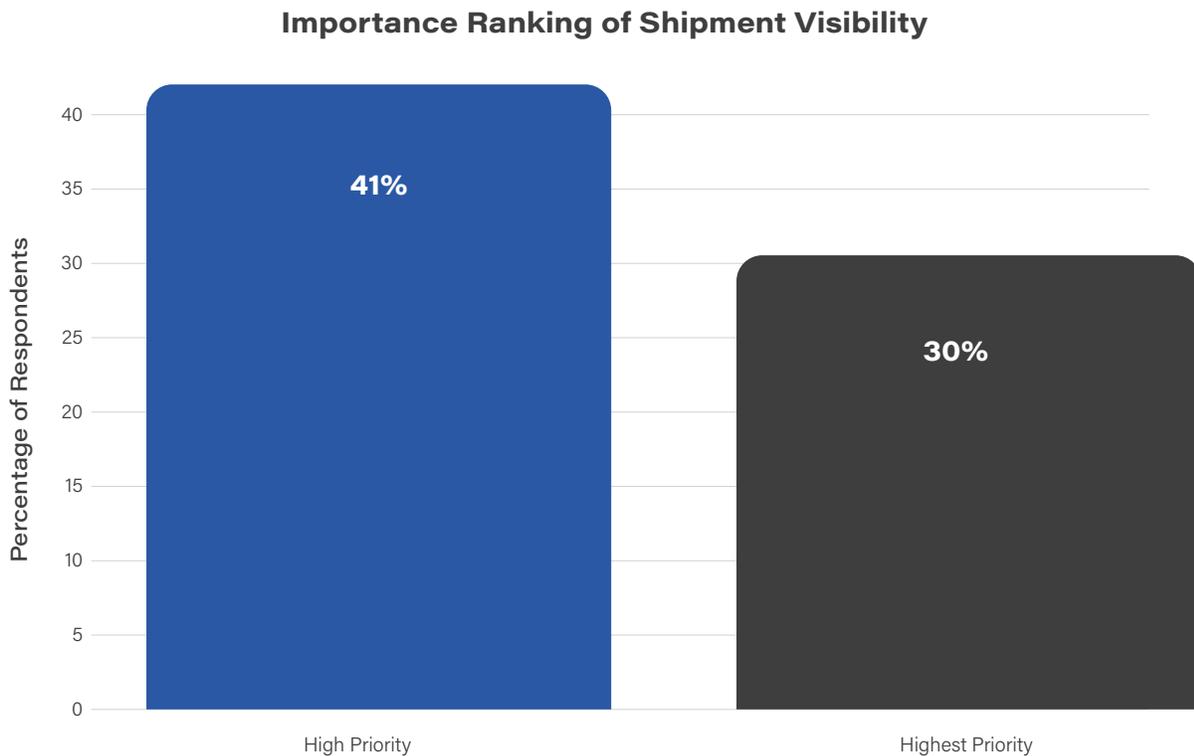
**Key Benefits Realized:** The implementation of real-time visibility solutions has led to notable improvements in customer service and reduced operational costs. Companies report greater accuracy in shipment tracking, enhanced responsiveness to supply chain disruptions, and improved inventory management as direct benefits.

**Challenges Faced:** Despite the benefits, companies encounter some key challenges in achieving effective visibility, including technological integration difficulties, high implementation costs, and data accuracy concerns. Efforts to overcome these challenges involve strategic investments in technology and partnerships with innovative technology providers.



## Visibility Within Digital Transformation

**Ranking of Shipment Visibility:** Based on the insights from the data, shipment visibility is acknowledged as a pivotal element of digital transformation efforts, with a significant emphasis placed on its importance. Specifically, 41% of respondents consider it a high priority, underlining its critical role in enhancing digital strategies. Furthermore, 30% of participants assign it the highest priority level, reinforcing the perception of shipment visibility as essential for fostering supply chain innovation and competitiveness.



**Strategic Priorities by Seniority Level and Company Size:** Analysis indicates that senior executives, particularly in larger enterprises, are more likely to prioritize investment in visibility solutions as part of their digital transformation initiatives. This trend underscores the strategic importance attributed to real-time visibility across different organizational levels and company sizes.

The analysis of the 2024 survey data reveals a clear consensus on the importance of real-time shipment visibility across industries, with significant investments being made in technology to address customer demands and operational challenges. **The takeaway? As companies navigate the complexities of modern supply chains, the emphasis on visibility as a cornerstone of digital transformation and operational efficiency continues to grow.**

## FUTURE OUTLOOK

The landscape of supply chain visibility is on the cusp of significant acceleration, driven by rapid technological advancements and evolving industry demands. As we look towards the future, several predictions, emerging technologies, and recommendations stand out, poised to redefine how companies manage and optimize their supply chains.



### Predictions for the Evolution of Supply Chain Visibility



**Sustainability & Visibility:** As sustainability becomes a critical component of supply chain strategies, visibility technologies will play a crucial role in tracking and verifying sustainable practices, from sourcing to delivery. This will include monitoring carbon footprints, ensuring ethical sourcing, and verifying compliance with environmental regulations.



**Greater Emphasis on Collaboration Platforms:** As supply chains become more interconnected, the use of collaborative platforms that enable real-time sharing of visibility data among all stakeholders will increase. These platforms will enhance transparency, efficiency, and the ability to respond swiftly to changes or challenges in the supply chain.



**Increased Integration of IoT and AI:** The integration of IoT devices and AI in supply chain operations is expected to deepen—offering more granular, real-time insights into shipment locations, conditions, and potential disruptions. This convergence will enable predictive analytics, facilitating proactive decision making and risk management.

## Recommendations for Supply Chain & Logistics Professionals



**Invest Strategically in Technology:** Companies should prioritize investments in technologies that offer the greatest impact on their visibility capabilities. This includes not only IoT and AI, but also integration platforms (or visibility platforms that have APIs to facilitate integration to existing systems) that can consolidate data from various sources into actionable insights.



**Foster Collaboration:** Build partnerships and collaborate with technology providers, industry groups, and supply chain partners to share knowledge, resources, and best practices for enhancing visibility.



**Embrace Digital Transformation:** Consider visibility not just as a tool for tracking shipments but as a strategic asset that can drive broader digital transformation efforts. This involves integrating visibility solutions with other digital initiatives to enhance operational efficiency, customer satisfaction, and competitive advantage.



**Focus on Talent & Training:** As technologies evolve, so too does the need for skilled personnel who can manage and leverage these tools effectively. Investing in training and development is crucial for building an agile, tech-savvy workforce capable of maximizing the benefits of enhanced visibility.



**Plan for Scalability:** Choose visibility solutions that can scale with your business. As supply chains expand and become more complex, the ability to adapt and grow your visibility capabilities will be crucial for long-term success.

The future of supply chain visibility is bright, with technologies and strategies evolving rapidly to meet the demands of a complex, dynamic global market. By staying ahead of trends, investing in the right technologies, and fostering a culture of innovation and collaboration, companies can position themselves to reap the benefits of unparalleled supply chain visibility, efficiency, and resilience.

## CONCLUSION

The “State of Visibility 2024” survey results offer a comprehensive overview of the current state and future trajectory of supply chain visibility. It elucidates the pivotal role of real-time shipment tracking in modern supply chain operations—underscored by the diverse and evolving demands of industries worldwide. The key findings from this survey, combined with an analysis of emerging trends and technologies, provide valuable insights for companies striving to enhance their visibility capabilities.

### Recap of Key Findings

**Widespread Demand for Real-Time Visibility:** There is a clear consensus across industries on the critical importance of real-time shipment visibility. This demand is driven by the need for greater operational efficiency, enhanced customer satisfaction, and the ability to proactively manage disruptions.

**Strategic Investments in Technology:** Companies are increasingly investing in advanced technologies such as IoT devices and AI to improve their visibility capabilities. These investments reflect a strategic shift towards leveraging digital tools to enhance supply chain resilience and competitiveness.

**Challenges & Opportunities:** While the benefits of enhanced visibility are widely recognized, companies face some challenges in integrating new technologies, managing data accuracy, and overcoming high implementation costs. That said, these challenges also present opportunities for innovation and collaboration.

**Digital Transformation as a Priority:** Shipment visibility is emerging as a cornerstone of broader digital transformation initiatives within companies of all shapes and sizes. This synergy highlights the strategic value of visibility in driving operational improvements and competitive advantage.



### Final Thoughts

Advancing shipment visibility is not merely a tactical goal but a strategic imperative for companies seeking to navigate the complexities of the global supply chain landscape. The findings from the “State of Visibility 2024” survey underscore the importance of real-time visibility in building more resilient, agile, and competitive supply chains. As companies look to the future, the adoption of innovative technologies and the pursuit of collaborative, industry-wide solutions will be key to unlocking the full potential of supply chain visibility.

In an era marked by rapid technological advancement and shifting market dynamics, the ability to maintain and enhance real-time shipment visibility will be a defining factor in the success and sustainability of supply chain operations. The insights garnered from this survey serve as a roadmap for companies aiming to achieve excellence in supply chain management, emphasizing the need for continuous innovation, strategic investment, and a forward-looking approach to supply chain visibility.

## METHODOLOGY DETAILS

### Survey Design & Objectives

Designed to capture a wide spectrum of insights, the survey targeted a comprehensive set of objectives, from assessing the demand for real-time visibility to understanding the barriers to its implementation. The structured questionnaire facilitated both quantitative and qualitative feedback, ensuring a deep dive into the nuances of supply chain visibility.

### Participant Demographics

The survey attracted participants from a broad range of industries and professional standings, providing a rich dataset for analysis.

- **Industry Representation:** Participants represented numerous distinct industries, including food, pharmaceutical, chemicals, logistics services, automotive, and healthcare, highlighting the universal relevance of shipment visibility.
- **Company Size:** Responses were well-distributed across different company sizes, with 49% from enterprises (1001+ employees), 10% from large companies (501-1000 employees), 20% from mid-sized companies (101-500 employees), and 21% from small companies (1-100 employees). This distribution underscores the varying visibility needs and challenges across different organizational sizes.
- **Seniority Level:** The survey captured insights across multiple levels of seniority, primarily including Managers (44%), Directors (16%), Analysts (15%), Vice Presidents (7%), and others filling the remainder. This stratification ensures a well-rounded perspective on visibility priorities and challenges from both strategic and operational viewpoints.
- **Distribution of Respondents by Industry:** The survey respondents represent a diverse representation across industries, with Logistics Service Providers (LSP)/3PLs leading at 37%, followed by high-value retail/consumer goods/luxury goods at 18%, and food/perishables at 15%. Other sectors include pharmaceuticals/life sciences (for cold chain monitoring) at 3%.

### Data Collection & Analysis

Utilizing an online platform, the survey was distributed via email and social media, engaging a diverse audience over a four-week period. The anonymized data underwent statistical analysis to discern patterns and draw correlations, focusing on the impact of industry, company size, and seniority level on shipment visibility needs and solutions.

### Limitations

The survey's findings, while insightful, are subject to the inherent limitations of self-selection bias, potentially skewing results towards those with a vested interest in supply chain visibility. Moreover, the broad industry representation, although beneficial for capturing a wide array of perspectives, may dilute sector-specific conclusions.

This methodology provides a robust framework for the detailed exploration of shipment visibility trends and challenges, as elucidated by a diverse group of supply chain professionals in the "State of Visibility 2024" report.

### About Tive

Tive is the global leader in supply chain and logistics visibility technology. More than 600 global shippers, logistics service providers, and retailers use Tive to monitor shipment location and condition in real time, gain actionable insights, and ensure end-customer satisfaction. Tive's cloud platform, patented sensor technology, and 24/7 Live Monitoring services reduce excursions and delays, minimize rejected loads, and decrease theft, damage, and spoilage. Customers count on Tive to ensure that shipments are delivered on time and in full—because every shipment matters.

For more information, visit [www.tive.com](http://www.tive.com).