

# LogiPharma

## The 2024 Playbook



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# Methodology

Even in the face of disruptions and uncertainty, the life sciences supply chain continues to grow with many bright new opportunities on the horizon for the taking.

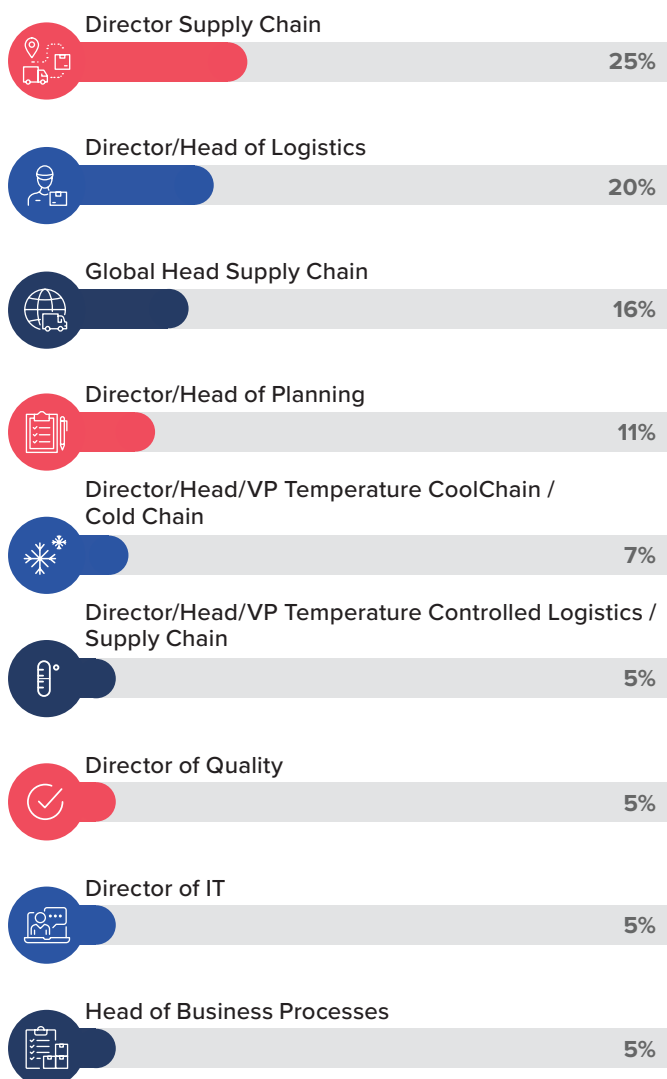
As a result, WBR Insights surveyed 150 supply chain leaders in Q4 of 2023 from various organisations to unpack the top challenges and the innovative solutions they are bringing to the table.

The survey was conducted by appointment over the telephone. The results were compiled and anonymised by WBR Insights and are presented here with analysis and commentary by Kinaxis, One Network Enterprises, Tive, YuanTing Cold Chain and the LogiPharma community.

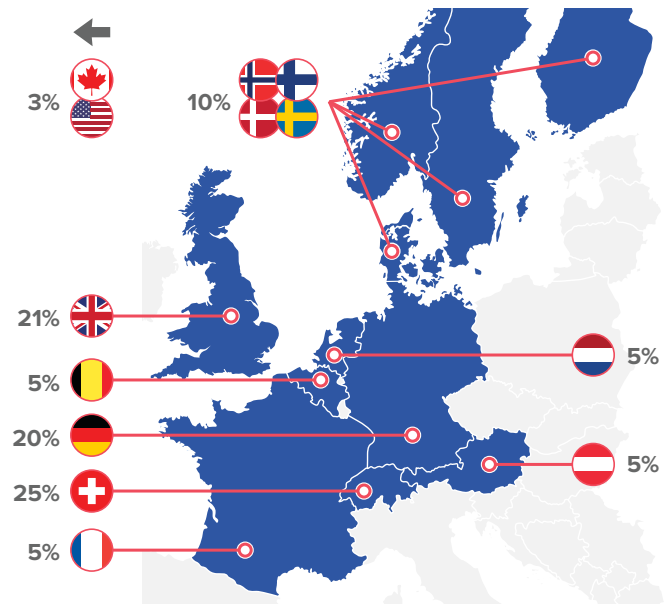
The WBR Insights topics detailed in this report will also be covered in the LogiPharma event, download the agenda [here](#).



## Which of the following best describes your job title?



## Where is your organisation located?





# Key Findings

1

## Planning Ahead

Increasing disruption and an ever more complex supply chain means traditional supply chain planning processes and techniques are no match for current turbulent conditions. A telling 57% of supply chain leaders are prioritising improving supply chain capabilities. With a surge of outsourcing, innovative modalities, and novel ways to reach patients, organisations must continue to expand their internal capabilities where they can.

4

## There is no 'I' in Team

Months after our LogiPharma Sustainability report was published, leaders are continuing to push for a greener future across their whole supply chain. This is clear with an impressive 43% who see supporting corporate sustainability initiatives as the top benefit of transportation data analysis. This is only matched by 47% prioritising collaboration with supply chain partners. Transportation data analysis is proving essential to fostering a culture of change that encourages a shift toward sustainable practices.

2

## Ctrl+Alt+Deliver

Artificial intelligence (AI) was the top trend for 2023 – and the AI craze is only set to rise in 2024. However, supply chain leaders are stripping back to basics with this new technology, prioritising adding value to supply chain planning (74%) and risk management (55%). As the cost of research and drug development continues to skyrocket, industry leaders are focussing on utilising automation to optimise their own supply chain operations.

5

## ESG Agenda

Our survey showcases that despite supply chain uncertainty, our respondents are prioritising impactful change in the next 3-5 years. An overwhelming number of respondents mentioned 'reducing emissions and monitoring our ESG performances' alongside aiming to 'increase productivity through the implementation of automation technologies'. ESG pledges are coming thick and fast in the pharma industry and leaders are taking a strong stance to deliver.

3

## Data Drama

Data management prevails as an obstacle supply chain leaders need to keep overcoming. When asked what their biggest challenge currently plaguing their logistics operations data management capabilities, 31% of our survey respondents noted they are currently struggling with data breaches and security. With vast intellectual property and sensitive patient information on the line, it is critical that the industry continues to re-evaluate its defences against cyber threats.

6

## The Balancing Act

Drug shortages continue to impact patient care and costs continue to rise. When asked exactly how they have been impacted, our respondents candidly shared their struggles. A large number revealed they have experienced 'patient care delays and increases in price' and 'an increased need for alternative medicines'. Despite ongoing turbulence, there is light at the end of the tunnel and supply chain leaders understand the importance of making supply chain changes and adapting strategies to lessen these challenges.



# A New Network Model to Achieve Multi-Tier Orchestration Across Pharmaceutical Value Chains



**Geoff Annesley**  
VP Solutions, Life Sciences  
One Network Enterprises

As we know, pharmaceutical supply chains are under immense pressure on all fronts.

From fulfilment issues (OTIF being as low as 20-30%), high inventory hold-ups and long lead times are making material availability a big concern. The problem is aggravated with shifting disease areas, new product introductions (NPI), and mergers and acquisitions.

This is because fundamental prerequisites for obtaining real-time, multi-tier upstream visibility, are missing, namely:

**A Single Version of Truth** – Every node in the supply chain has a data structure and model that doesn't always marry with the next node. This makes transaction monitoring across the value chain virtually impossible. A common master and transaction data model is required across a pharma brands' upstream supply chain that includes CDMOs, suppliers, packagers and API vendors, enabled through a single unified data model.

**Real Time Layer of Orchestration & Intelligence (Network of Networks)** – Given the disparate parties on the network and their disparate data models and integration standards, a common layer of orchestration that imbibes real-time data from internal and external sources are needed.

## A Ubiquitous "Network of Networks"

Many networks fail to meet these basic requirements.

Most existing networks in the market are mostly hub and spoke where the hub (pharma brand) benefits while the individual spokes (CDMOs, suppliers, carriers) are islands providing siloed datasets to the hub.

The hub has direct tier-1 visibility of data pertaining to its own products, shipments and SKUs, but not into other critical constraints such as tier-2 excipient shortages at the CDMOs which could constrain the finished product. The hub also has no visibility into capacity/line/network-wide constraints at the CDMO especially when the CDMO is trying to optimize its product mix for multiple competing brands.

A federated "network of networks" model elegantly solves this while adhering to strict data privacy rules such as HIPPA.

Network adapters can support all major enterprise and legacy partner systems, including planning solutions, risk networks, third-party networks (blockchain), and healthcare data repositories. The network can incorporate live data sources such as Internet of Things (IoT), telematics, weather, traffic, and geopolitical data.

Uniquely, a network of network enables all trading partners to onboard just once, then they can connect and transact with any other organisation already on the network. It includes master data management tools, including AI tools or "dababots" that enable organisations to quickly gather, cleanse, reconcile, and publish their master data to the network.

This data must be strictly controlled through a robust permissions framework. The inclusiveness of the network easily enables a chain of custody across parties and the network and facilitates compliance with DSCSA guidelines including GS1 and EPICS standards.

## An Ecosystem in Which Everybody Wins

In this network of networks model everyone in the ecosystem benefits from the extensive data and holistic orchestration. The network enables planning to be tied to execution so that as plans change, execution is kept in sync, and as flows change in execution, the plan is updated and reflective of operations today, tomorrow and in the future.

Everyone also benefits from end-to-end visibility and collaboration. This spans from basic collaboration around forecast, PO, ASN and commits between brands and CDMOs, to tracking multi-tier, multi-party shipments, production monitoring, to understanding material and capacity constraints across all tiers of suppliers.

The system can then incrementally adjust production plan and capacity allocations downstream. This improves fulfilment for pharma brands and helps ensure product availability especially with shifting demand and epidemiological landscapes. This also enables AI algorithms to optimise outcomes across tiers and manage decision-making through dynamic prescriptions.

It is this ecosystem-wide value that drives adoption and optimal results, where a typical network undermines it, because "spokes" do the work to benefit the "hub."

## Chapter One:

# Solving Supply Chain Challenges in Pharma with a Digital Network

**Innovative solutions are taking centre stage as organisations are grappling with mounting financial challenges. Supply chain leaders are stripping back to the basics, prioritising visibility and looking to optimise their supply, demand and logistics. All signs point towards technology and the unlocked potential of digital networks.**

When asked to select their top focus areas for their pharma supply chain, the majority (57%) shared that they are aiming to improve their planning capabilities. Elsewhere, 53% are looking to develop their supply chain resilience and risk management. The two go hand in hand, particularly as geopolitical tensions rise and uncertainty wages on. Leaders are prioritising efficiency through optimised scheduling and resourcing. This means organisations can act with speed and confidence when navigating turbulence.

It is important to have this in mind when considering the scale-up of the high-risk, low-reward of next-gen, gene-based therapy. Two-thirds of our survey respondents believe their organisation will require radically new supply chain models.

No longer a tale of science fiction, gene therapies are emerging as pharma's next big wave and organisations are seeing the untapped potential for saving lives and money. Implementing new models will help overcome initial setbacks to reap the ultimate rewards.

Similarly, AI is transforming the pharma industry before our eyes. When we asked respondents about their focus areas, a whopping 74% of supply chain leaders feel AI can bring the most value to their supply chain planning.

Again, this is closely linked to 55% who view supply chain risk management as their second priority for AI. It is evident that organisations see the potential of harnessing AI for game-changing solutions, but our survey shows that they remain cautious about where their organisation can benefit from automation.

Supply chain leaders, despite rising pressure, understand the need to adopt a network that adapts quickly so that when plans change, organisations can operate in a way that battles uncertainty. In a world of challenges, embracing technology emerges as the compass guiding life science supply chains towards resilience and uncharted success.

## The LogiPharma Podcast

As pressures continue to rise, adopting the right technology cannot be achieved without stellar collaboration and leadership. To hear more top leadership strategies, listen to our interview with industry expert, Eme Luth on the LogiPharma Podcast. She dissects her leadership philosophies and key tips to keep teams motivated.

And be sure to follow us on **Spotify** and **Apple Podcasts** where you can listen to every episode of the LogiPharma Podcast.



**Click to Listen**



**Eme Luth**

*Executive Director  
& Global Head of  
ERP and Corporate  
Functions IT*  
**Gilead Sciences**

## Select the top three imperatives or focus areas for your pharma supply chain?



"It is interesting to see Pharma companies prioritise Planning, Risk Resilience and New Supply Chains as the top 3 imperatives for 2024. With ever-changing supply constraints and demand variability, planning systems need to be equipped to capture shocks beyond tier 1 suppliers and incrementally adjust and optimise the planning and execution cycles. Risk solutions should be tightly coupled to planning engines that are able to sense and detect sub-tier risks and consequent impact on planning & fulfillment thereby improving resiliency in the E2E supply chain."



**Geoff Annesley**  
VP Solutions, Life Sciences  
One Network Enterprises

"Improving supply chain planning and minimising risk and building resilience are the top two priorities. These go hand-in-hand – without end to end visibility and the transparency that comes with strong planning foundation, organisations will have blind spots and will not identify areas of risk until it's too late."



**Manda Schweitzer-Miller**  
Industry Marketing Principal  
Kinaxis

"Supply chain resilience and risk management is always such an important area to focus on and for us this would be the most important imperative for this year. However, I can see why such a large number are focussing on their planning capabilities. Optimising these capabilities will help the quality of trade-off decision-making. In addition, Supply Chain optimisation to drive affordability and market access is a key area according to me."



**Arie Moruanx**  
Senior Director Strategy & Digital Transformation  
Johnson & Johnson

"In a post-pandemic world, we are being hit with a lot of disruptions ranging from API shortages to increased lead times of various components, including but not limited to, packaging materials alongside unforeseen logistical challenges, such as what's happening currently in the Red Sea. I think that resilience and planning can be extremely difficult at the moment with complex supply chains as organisations try to move up value chains and diversify portfolios."

Furthermore, numerous markets are presently grappling with significant pricing, governmental, and regulatory hurdles. A primary concern for supply chain leaders is identifying avenues to maximize value from their investments."

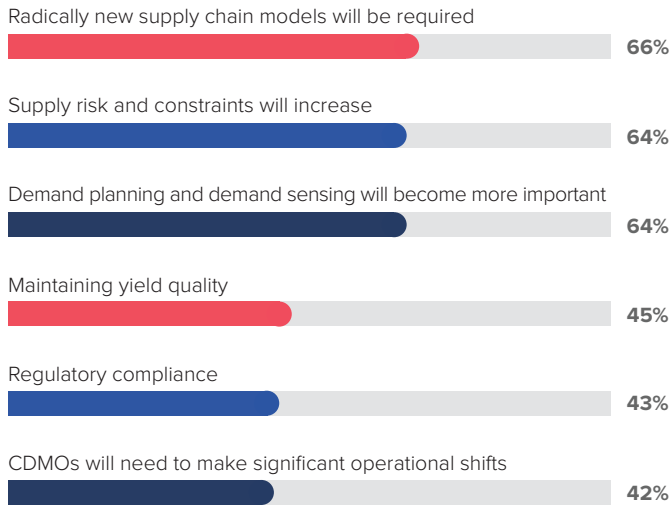


**Iqbal Noormohamed**  
Senior Director of Demand Planning & Logistics – Europe  
Glenmark Pharmaceuticals





## As next-gen gene-based therapy scales up, what supply chain challenges do you expect?



"Gene-Based (next-gen) Drugs would require a fresh new supply chain design that shifts from traditional KPIs of cost to service optimisation. Close looped multi-echelon networks that connect supply with demand working through compressed lead times, proactive demand sensing all the way through detailed chain of custody of the final product will be a critical enabler.



**Geoff Annesley**  
VP Solutions, Life Sciences  
**One Network Enterprises**

Brand owners should be able to combine patient, product, demand, and supply data in one application layer for effective end-to-end orchestration. Rapid patient/provider onboarding and smart scheduling features to ensure higher Patient Satisfaction will be key in ensuring patient compliance and experience."

"When it comes to next-gen gene-based therapy, scaling up will most likely require a new model for success. The volumes are lower, but the stakes are definitely high, so traceability and control becomes much more important. There is little to no room for error and requires very quick turnarounds, despite the variable quality of the base material. With this high risk, high complexity, radically new models are needed."



**Arie Moruanx**  
Senior Director Strategy & Digital Transformation  
**Johnson & Johnson**

"I agree with the respondents here and think the results reflect the state of the industry well. For new launches, you will need new and innovative supply chain models to ensure gene-based therapy can scale up. However, when we talk about new technology and discoveries, demand planning for us is always going to be crucial and an ongoing challenge to overcome."



**Iqbal Noormohamed**  
Senior Director of Demand Planning & Logistics – Europe  
**Glenmark Pharmaceuticals**

"The results here closely correspond to the previous question's results around top priorities, and clearly show that risk mitigation and management, along with improved planning capabilities, are paramount to ensuring readiness for the next generation of highly personalised therapies."



**Will Robinson**  
Conference Director  
**LogiPharma 2024**

## What top three areas do you expect AI will bring the most value to your supply chain?



"AI use cases in Pharma Supply Chains are moving from "concept" to "mainstream" in 2024. AI solutions need to feed off real-time network data for effective decision support. Gen AI and Large Language Models are helping identify network wide constraints impacting a specific Raw Material/Excipient source and accordingly fine tune the supply/ replenishment plans for all or some of the product and therapy areas impacted including scouting for alternate supply sources across existing Approved Vendor Databases and optimising material allocation ratios."



**Geoff Annesley**  
VP Solutions, Life Sciences  
One Network Enterprises

"AI is such a big topic and is opening brand new possibilities for the industry. In addition to the top areas listed above, I want to point out the opportunities to use AI to clean data and use innovative data management solutions to fast-track code set-up. The effects will be undeniably positive on the launch time for new products."



**Arie Moruanx**  
Senior Director Strategy & Digital Transformation  
Johnson & Johnson

"AI has become a buzzword over the past couple of years and is not going to be slowing down anytime soon. In terms of where AI can bring the most value to the supply chain, supply chain planning takes centre stage.

From the simulation, modelling and risk-based approaches, cutting out the manual process of these types of tasks will save weeks, potentially months of time. Notably for us, we are also seeing great results when using AI for logistics planning."



**Iqbal Noormohamed**  
Senior Director of Demand Planning & Logistics – Europe  
Glenmark Pharmaceuticals

"The use of AI and RPA in supply chain planning activities is something that has been steadily growing in previous years, and we're starting to see large-scale application and implementation across the industry. Ones to watch within this space are automated logistics performance and tendering and supply chain risk management; two key drivers that we've seen significant gains on the impact of this technology.

Another not mentioned here, but which we're starting to increase applications of advanced automation within, is sustainability monitoring and supplier management in relation to carbon emissions, so watch this space..."



**Will Robinson**  
Conference Director  
LogiPharma 2024



## Chapter Two:

# Harnessing the Power of Data Analytics

**The pharma industry remains very reliant on data in all parts of the supply chain. In turn, supply chain leaders are constantly working to overcome data challenges both old and new. However, as digitalisation becomes the new normal, the stakes have never been higher.**

Our survey showcases that the pharma industry is one of the most frequently attacked sectors. When asked what the biggest challenge respondents are facing when it comes to data management, just under a third (31%) candidly revealed that they are concerned about data breaches and security.

From its investment in research, groundbreaking breakthroughs and the sheer amount of private patient information, protection against cyber threats are top of the agenda.

Despite these risks and challenges, there are a lot of positives on the horizon when it comes to data. We asked our 150 supply chain leaders if they currently gather real-time shipment data to help improve decision-making in their logistics operations.

An overwhelming 97% gather on some if not all shipments. Notably, there are no respondents who do not have a plan to start gathering data in the near future. In today's fast-paced, connected world, being able to anticipate trends and react quickly is essential.

Similarly, organisations are finding a lot of value in transportation data analysis. Our survey respondents shared the key benefits they experienced as a result and the responses showcase how much supply chain leaders are prioritising positive change.

The highest majority (47%) revealed their top benefit is improving collaboration and data sharing with their supply chain partners which was closely followed by 43% looking to help support corporate sustainability initiatives. The industry is driving forward positive change and data analysis is holding the keys to success.





## What are the biggest challenges your organisation faces when it comes to data management in your logistics operations?



\* For the results above, respondents were instructed to select their top three challenges.

"I think the responses being prioritised here reflect the industry well. Data breaches are becoming more regular, and I am not surprised to see this at the top of the list. From a general point of view, many data challenges are caused by data inconsistencies. When you have so many different sources and systems, it can be difficult to keep them aligned."



**Arie Moruanx**  
Senior Director Strategy & Digital Transformation  
Johnson & Johnson

"I am surprised to see such a large number of respondents struggling with data breaches and data security.

In terms of addressing these challenges, I believe it is important to monitor how data transmits over to partners. When done properly, it minimises the chances for data breaches or potential data security challenges. For us we validate our providers and when it comes to IT infrastructure added to which we deploy a number of technical and organisational measures to mitigate such risks. On top of this, we try to host the data internally whereby we can retain control and thereby limit the chance of a breach in security."



**Iqbal Noormohamed**  
Senior Director of Demand Planning & Logistics – Europe  
Glenmark Pharmaceuticals

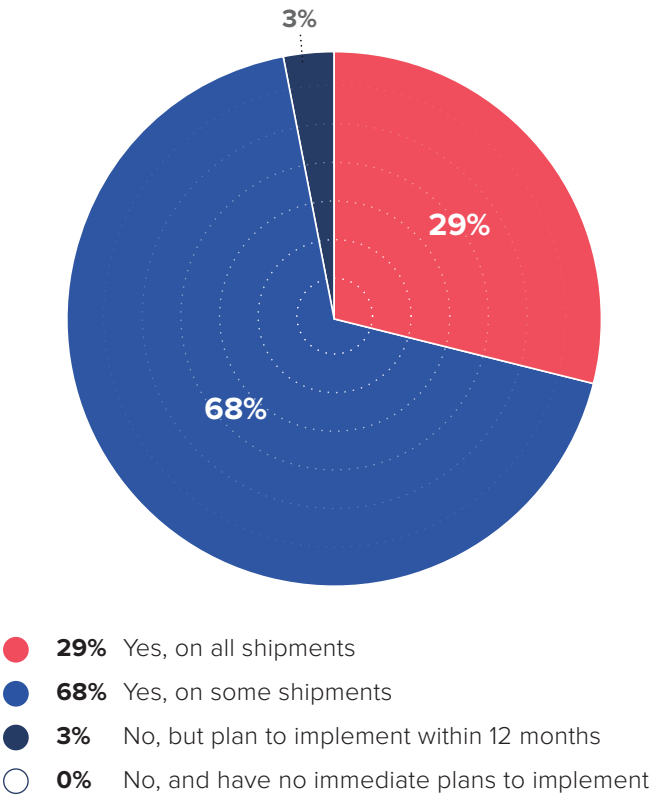
"The industry deals with a lot of sensitive data (financially sensitive data, patient data and a myriad of other forms), and the industry continues to experience significant cyber-attacks from time to time, and so ensuring the security of data remains paramount.

However, considering the regularity with which I hear that data integration and standardisation across internal systems, and with partners, is a significant challenge, I'm surprised that these don't come top of the pile! Either way - the above shows that data continues to be a huge source of both challenges and opportunities for the industry moving forward."



**Will Robinson**  
Conference Director  
LogiPharma 2024

Do you currently gather real-time shipment data to improve decision-making in your logistics operations?



"Proprietary, real-time data on physical operations and logistics is the new oil, and companies cannot afford to have data latencies if they want to stay agile in today's pharmaceutical supply chains. With 97% of respondents stating they gather real-time data on at least some shipments, it's clear that pharmaceutical logistics leaders are eager to adapt and are prioritizing real-time shipment visibility in their overall digital transformation efforts."



**Krenar Komoni**  
Founder & CEO  
**Tive**

"By reducing carrying costs, curbing emissions, and shortening product life cycles by moving both raw materials and finished products through the supply chain with the least amount of friction possible, pharmaceutical logistics leaders can ensure life-saving therapies remain affordable while creating a sustainable supply chain that prioritizes patient well-being."



**Alex Guillen**  
Global SME, Life Science and Pharma  
**Tive**

"This result is particularly interesting when you consider the cost of infrastructure and the set up costs involved. Whether it is going to be £100,000 or £1,000,000, you will likely deploy different resources and different technologies. Hence, I am not surprised to see most respondents only gathering data on some but not all shipments."

This result is particularly encouraging to see such a large number of supply chain leaders gather data or at least planning to in the next few months. A lot of positive change is on the horizon."



**Iqbal Noormohamed**  
Senior Director of Demand Planning & Logistics – Europe  
**Glenmark Pharmaceuticals**



## What do you see as the key benefits of transportation data analysis?

Improving collaboration and data sharing with your supply chain partners



Helping support corporate sustainability initiatives

Protecting product quality and safety

Reducing inventory carrying costs

Optimising shipping routes and modes

Comparing carrier and/or logistics partner performance

Ensuring regulatory compliance

Reducing instances of shipment damage or spoilage

Providing end-to-end visibility across transportation modes – over-the-road, ocean, air, and rail

Reducing risk / enhancing security / preventing theft

Minimising overall shipping costs

Supporting overall digital transformation efforts

Reducing insurance costs/evidence for insurance claims

Enhancing end-customer satisfaction

\* For the results above, respondents were instructed to select their top benefits which applied to them.

"As verified by over half of respondents, leaders in pharmaceutical logistics are recognizing the importance of collaboration across the supply chain more than ever. It's not enough to simply accumulate data; to remain resilient against shortages and other disruptions, data cannot remain in siloes.



**Alex Guillen**

Global SME, Life Science and Pharma  
Tive

"When it comes to optimising supply chains, all roads lead to improving efficiency and generating operating leverage for the business. Analysis on transportation and logistics data empowers logistics leaders to identify ways to keep inventory moving with the least amount of idle time, redundancies, and delays."



**Krenar Komoni**

Founder & CEO  
Tive

"This question for me is about reliability and predictability. The other options here are all very important and dependant on the individual organisation but in my opinion, mastering the basics are most important. This will help push forward sustainability initiatives and improve collaboration."



**Arie Moruanx**

Senior Director Strategy & Digital Transformation  
Johnson & Johnson

"I am not surprised by these responses and think they accurately reflect the current state of the industry. Leaders are really pushing forward sustainable practices alongside collaboration resulting in major pay offs. These will also be our key focus areas for 2024."



**Iqbal Noormohamed**

Senior Director of Demand Planning & Logistics – Europe  
Glenmark Pharmaceuticals

"I think that the reason that we are seeing very equal distribution of responses here is that the benefits of transportation data analysis (in combination with a transparency and willingness to share this data across all parties) are not any one of the above, but theoretically all of the above. Provided all stakeholders in the E2E supply chain view data transparency and collaboration as a positive, every one of these outcomes is possible."



**Will Robinson**

Conference Director  
LogiPharma 2024



## Chapter Three:

# Balancing Risk and Improving Resilience Against Disruption

**Amid growing geopolitical tensions and ongoing supply chain uncertainty, finding new and innovative ways to mitigate risk and build resilience against disruption has never been more timely. The landscape remains dynamic and intricate, and successful navigation demands a strategic approach but with greater collaboration.**

Our research revealed the true impact that drug shortages are having on patient care and financials for organisations. Our respondents shared that they are facing 'negative impacts in the quality of patient care' and 'caused disruptions that have affected timely access to medication'.

As a result, supply chain leaders are facing a large loss in revenue and a rise in competition. However, there is light at the end of the tunnel and respondents are looking for alternative medications and procurement solutions to put their brands back on the rise to navigate this complex terrain.

In Chapter One, respondents noted their focus areas for the short term is improving planning and resilience.

However, this differs for the supply chain initiatives that they aim to focus on in the next 3-5 years. A large majority mentioned 'creating a positive ESG impact in our supply chain' and 'implementing more sustainable practises'. While organisations must improve their resilience and risk management, they also understand that embracing greener initiatives will be a powerful tool for growth in the long term.

When it comes to collaboration, organisations are working towards integrating finance teams into their supply chains. Just under two-thirds (65%) of our survey respondents would confidently say their finance team is relatively integrated via monthly calls and consistent data inputs.

Although there are no respondents who aren't working towards integration, just 11% would say they are 'very integrated' with weekly check-ins and data inputs. Hence, although collaboration is at the forefront of leaders' minds, there is still a lot of work to be done.

Similarly, when it comes to clinical and commercial supply chain integration an undeniable majority (63%) revealed that they are in the process of linking their clinical and commercial supply chain organisations. In comparison, only 29% would say they are completely integrated and connected. The industry is seeing the competitive advantage that when fighting risk, collaboration holds the keys to a greater reward.



## We asked our respondents about the major supply chain initiatives for the next 3-5 years. Here is what they are prioritising:

"

Introductions of responsible sourcing initiatives to monitor our ESG performances in our supply chain. We also aim to reduce emissions for a better future."

"

We seek to improve our risk management capabilities for our supply chain operations given the uncertainty in global markets."

"

We are planning to make use of data for better decision-making and planning in the next 3-5 years."

"

We plan to reduce the costs across the supply chain in the next 3-5 years."

"

Embedding sustainability in our operations will be the main initiative."

"

We are looking forward to strengthening our supplier and partner collaborations and also develop and further increase our tech capabilities in AI and ML. We are also currently working towards fully integrating our supply chain processes too."

"Many responses focused on sustainability objectives but that isn't reflected in responses in the top three imperatives. To have an impact in the next 3-5 years those investments and initiatives need to be kicking off now."



**Allen Jacques**  
Industry Thought Leader  
Kinaxis

"I agree with the respondents here. It is inevitable that these are the key initiatives that will dominate in 3-5 years' time. ESG has already been having a positive impact for some time now as well making use of data for better decision making. As an industry, there is a clear desire to drive change forward and we are already seeing the pay offs."



**Iqbal Noormohamed**  
Senior Director of Demand Planning & Logistics – Europe  
Glenmark Pharmaceuticals

## We asked our respondents about how drug shortages impacted patient care and financials for their organisation. Here is what they told us:

"

It has compromised patient care in many areas and has also impacted our costs."

"

Our revenue was hit negatively and there was a need to source for alternatives."

"

The procurement of materials became expensive."

"

Maintaining consistency was harder and we had faced problems with our supply chain processes."

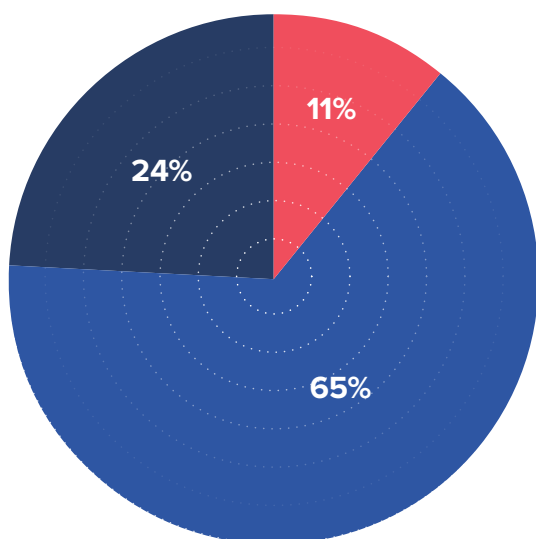
"

There are emerging challenges due to geopolitical tensions. Drug shortages are bound to increase when we cannot predict the necessary amounts to send to different regions."

"

Specific products have not been available with known providers. We've had to connect with other vendors to source goods. It affected financials and the time taken to complete processes."

### How integrated is finance into the supply chain?



- **11%** Very Integrated (Weekly calls and regular data inputs)
- **65%** Integrated (Monthly calls and consistent data inputs)
- **24%** Somewhat Integrated (Limited calls and data inputs only when necessary)
- **0%** Not Integrated (Lack of calls and data inputs)

"Tight integration between Financial Planning and Supply Chain Execution systems are on the rise as Pharma Supply Chains shift from "batch" to "concurrent" planning enabled by flexible manufacturing lines and necessitated by shifting drug demand and epidemiological profiles.

Any change in manufacturing/quality throughput/yield can have ripple effects on planning and downstream fulfilment. Disparate tech stacks and siloed data models across these functions defeat the case for close collaboration and optimisation. A cross-functional solution enabled with single integrated data model and smart workflows could help bridge this gap."



**Geoff Annesley**  
VP Solutions, Life Sciences  
One Network Enterprises

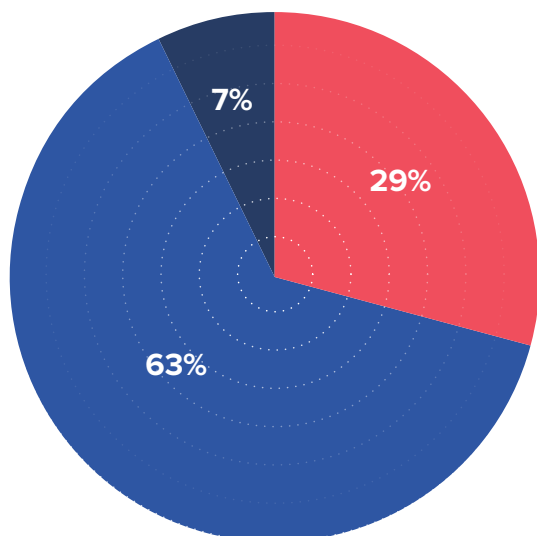
"I think it is fair to say that many companies fall short when it comes to integrating their financials into their supply chain. It is difficult to connect seamlessly and is something that a lot of companies struggle with. I see the number of those who are very integrated increasing, but this will take some time."



**Arie Moruanx**  
Senior Director Strategy & Digital Transformation  
Johnson & Johnson



## How integrated are your clinical and commercial supply chain organisations?



- **29%** Our clinical and commercial supply chain organisations are completely integrated and connected
- **63%** We are in the process of integrating and linking our clinical and commercial supply chain organisations
- **7%** We are considering integrating our clinical and commercial supply chain organisations
- **0%** We currently have no plans to integrate our clinical and commercial supply chain organisations

"Better connecting clinical and commercial supply chains will ensure a seamless handover post Phase III for product launches. It will also ensure that internal and/or external manufacturing capacities are scalable and match commercial projections short, medium, and long term."



**Manda Schweitzer-Miller**  
Industry Marketing Principal  
Kinaxis

"In terms of clinical and commercial supply chains, I would say that it depends on the organisations' size and type. It's difficult for me to fully comment on this as our organisation separates our R&D segment (through the Ichnos Glenmark Innovation [IGI] alliance) and our generic and branded portfolio, although I could see synergies potentially forming through the integration of our clinical and finished goods supply chains."



**Iqbal Noormohamed**  
Senior Director of Demand Planning & Logistics – Europe  
Glenmark Pharmaceuticals



# Conclusion

The life science supply chain is undergoing pivotal change, gearing up against volatility and supply chain leaders are at the forefront of driving this change. While our survey respondents are working hard to make a lasting impact, they are still focused on fine-tuning their internal processes to unlock greater efficiency.

Our research dives into the top challenges plaguing supply chain leaders in both the long and short term. An overwhelming majority shared their desire to improve their supply chain planning capabilities and their resilience and risk management. However, in the next 3-5 years these goals shift towards making wider, more impactful change. A large number will be working towards 'creating a positive ESG impact' and 'implementing sustainability initiatives'. Supply chain leaders are mastering their internal processes while harbouring an optimistic outlook for the future.

The impact of AI on supply chains has been undeniable and we will explore this further in a LogiPharma AI report later this year. Despite seemingly endless possibilities, leaders remain cautious about integrating AI too quickly, again prioritising internal efficiency and resilience in the form of planning and risk management. This will likely shift in the next year but for the time being, the priority remains in cutting costs and developing adaptability.

Data analysis is stirring up some positive headlines with many respondents starting to gather real-time shipment data to help improve their decision-making in their logistics operations. Notably, no leaders are sharing with us that they do not plan to start collecting shipment data. The industry is changing course and with greater visibility into transportation, organisations are looking to both reduce emissions and cut costs by the thousands.

Additionally, there is a greater sense of urgency now, than pre-pandemic to counter data breaches and security threats. Cyber breaches in the life sciences supply chain have severe consequences so to be able to continue innovating and serving patients, a comprehensive approach to security is essential.

The insights shared in this playbook will help organisations and their partners draw a road map for the year ahead, showcasing the top trends alongside industry-leading solutions to help stay ahead of the competition. Success in an ever-evolving sector is not without its challenges. However, these challenges are being addressed head-on and impactful change is fast approaching as a result.



# Key Suggestions

1

**AI is set to bring a lot of value to the industry, identifying patterns and trends, optimising planning capabilities and beyond.**

However, the sheer amount of data collected to make these opportunities a reality increases the risk of security breaches. To fully capitalise on the cost-saving and efficiency potential AI brings, organisations need to be cautious and take the correct steps to ensure that these challenges are avoided.

3

**Sustainability remains at the forefront of supply chain leaders' minds.**

However, when it comes to transportation data analysis, organisations are looking for more ways to support corporate sustainability initiatives. When pursuing a sustainable supply chain, it is crucial to have the involvement and commitment from those in leadership positions. This helps foster a culture of change and ensures the possibilities data analysis opens aren't restricted by a lack of internal buy-in.

2

**As our survey showcased next-gen, gene-based therapy is not without its challenges.**

However, cooperation and partnerships are key in ensuring these continue to scale up. Consistent amounts of open and clear communication between partners are essential when facilitating change, setting attainable goals and meeting realistic timelines.

4

**Despite challenges emerging due to drug shortages, some innovative mitigation strategies are emerging.**

Collaboration is key to lessening the impact. For example, forming a resource allocation committee establishes key processes for approving alternative therapies and readdresses ethical considerations. Having these processes in place strengthens organisations' ability to handle supply chain risk. Addressing this is key.



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