



LOGISTICS 2030

NAVIGATING A DISRUPTIVE DECADE

Year 3-Strategic Sourcing and Inbound Logistics







HARBERT COLLEGE OF BUSINESS Center of Supply Closin Innovation







A Brief Note of Introduction

In 2018 when we began the Logistics 2030 project, little did we know that the following three years would be the most transformative period for supply chains. Market volatility caused by the pandemic, the subsequent economic downturn, and severe weather events have converged to cause enormous stress on all areas of the supply chain. One of our focus group participants said it best "Now everyone wants to go back to "normal" – how things used to be. But most of us don't realize how the normal has changed – the future has changed."

The year 2030 is getting closer. Over the next nine years, supply chain professionals will continue to encounter many challenges and rapid change. It is important to assess the strategies, requirements, and tools that will shape supply chains and drive success over the next decade.

Our team of experts from Auburn University's Center for Supply Chain Innovation, the Council of Supply Chain Management Professionals (CSCMP), the National Shippers Strategic Transportation Council (NASSTRAC), and AGILE Business Media (publisher of DC Velocity & CSCMP's Supply Chain Quarterly), has undertaken a multi-year study of these future issues. We have previously explored transportation and warehousing.

This year's selected topic is Strategic Sourcing and Inbound Logistics. We collected expert insights on future sourcing issues via a survey, focus groups, and individual interviews. The resulting information is contained in this report

We would like to thank all the sourcing/procurement and logistics professionals who participated in this study and hope you will find the information contained within this report useful to your transportation/supply chain networks.

Gail RutkowskiExecutive Director



Mark Baxa
President and CEO



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ABOUT THE STUDY

"We didn't have a great plan for handling any kind of major risks to our supply chain. It's just never hit us this hard. Now, everybody wants to go back to "normal" – how things used to be. But most of us don't realize how the normal has changed, the future has changed. "

In the wake of the global pandemic, strategic sourcing and inbound logistics have become increasingly vital in supply chain management. Operating complex supply chains amid multiple interweaving disruptions is becoming ever more challenging, requiring a holistic business understanding.

Given the current environment, it is easy to attribute almost any business challenge to the whirlwind of global shutdowns and re-starts forced by a global pandemic. However, the current situation masks many long-term trends that have been on the radar of business executives and thought leaders for their disruptive potential. The pandemic has turbocharged these trends to create a perfect storm that needs our attention.

In the third installment of the Logistics 2030 (L-2030) annual study, we present a long-term view of the supply side of global supply chains. This report takes an in-depth look at strategic challenges in sourcing and inbound logistics.

We highlight future initiatives through which organizations are building requisite capabilities to effectively respond to these challenges. These initiatives relate to finding reliable sources of supply, deploying capable transportation arrangements, and leveraging technology and talent development strategies that will be needed to ensure business success in the coming years.

Our analysis provides a comparative view of today's capabilities and how these capabilities match up with the needs of the next decade. The findings of this report are based on the expert insights from multiple focus group sessions and survey responses from hundreds of sourcing experts and logistics professionals. We share these insights to broaden readers' perspectives about future challenges and relevant strategies that can meet these challenges.

THE IMPERATIVE

Future supply chain dynamics are intricate and onerous. We need to account for these challenges now to be ready. The Logistics 2030 study highlights relevant issues and offers insights that can help organizations prepare for these future challenges.

Research Objectives:

Strategic Sourcing and Inbound Logistics in 2030

Our third L-2030 series report targets sourcing and inbound logistics capabilities, essential to an organization's ability to satisfy customers' needs. We investigate the essential issues that warrant a company's earnest consideration for future success:

Operational Tactics: What actions and strategies can help you meet future sourcing and inbound logistics needs?

Technology and Analytics: Which technology applications will have the most impact in sourcing and inbound logistics?

Talent Management: What managerial skills in sourcing and inbound logistics do you need to become the future leader?

In the pages ahead, we present future-focused analyses of these key questions, along with actionable takeaways. The report also highlights impending issues and investment decisions that sourcing and logistics professionals must address.

Study Methodology

The L-2030 research priorities were derived through analysis of industry trends and discussions with supply chain executives. To gain diverse insights, we sought input from CSCMP and NASSTRAC members, DC Velocity and CSCMP's Supply Chain Quarterly subscribers, our sponsor's network and CSCI partners.

The valued insights of industry practitioners were captured through a multi-method research approach, using:

Expert Panels: Six, hour-long, focus group sessions to uncover the most pressing sourcing and inbound logistics issues.

Online Survey: A 50-question survey captured respondents' insights on current and future sourcing and logistics issues.

This research approach engaged supply chain professionals from a broad array of organizations and industries. Thus, we are able to present an accurate narrative on tactics, technology, and talent issues. The report includes direct quotes from experts who participated in the focus groups and a compilation of responses from the online survey.

KEY NUMBERS

6 focus groups

275+ survey respondents

50% of participants from large companies (revenue over \$1 billion)

Average of 23 years' work experience in supply and logistics management roles

ORGANZATIONAL PRIORITIES

"The focus around our procurement organization is no longer to drive value through lowering costs. The value is to keep the business running through uninterrupted supply."

Finding ways to fix problems and getting out of difficult situations have always been the forte of supply chain management professionals. Their response to the current challenges on the supply side of their businesses is no different. Our report not only highlights the challenges, but also provides an in-depth understanding of different strategies that are being devised to respond to these challenges. We start the report by looking at the long-term organizational priorities that guide these strategies.

In strategic sourcing, organizations are focused on a number of key priorities. On top of the list for 2030 is finding ways to curtail rising procurement costs. The cost pressures are rooted in supply side issues, as well as the changing global regulatory landscape that is adding to the uncertainty. Another organizational priority identified in our report is developing future leaders that understand both the science and the art of supply risk management.

On the inbound logistics side, the top of the priority list is building end-to-end visibility to detect and respond to logistics challenges. Other items on the priority list include: shipment tracking, e-Processes, and service performance. It is interesting to note that 2030 organizational priorities are significantly different from today in terms of their strategic focus (see infographic on the next page). These differences highlight the critical need for organizations to pivot and adapt their capabilities to the changing business landscape.

We expand below on these organizational priorities by presenting our analysis in two main sections of this report: (i) strategic sourcing, and (ii) inbound logistics. Each section provides a detailed discussion of issues and challenges, and strategies related to business processes, technology, and talent management issues. We wrap up the report with specific action items that will guide you in developing a plan to deliver on the aforementioned priorities.

IT'S A NEW WORLD

"Things I've never seen in my career are now the "normal". Times of predictable lead times and reliable supply sources are gone. We need a new game plan!"

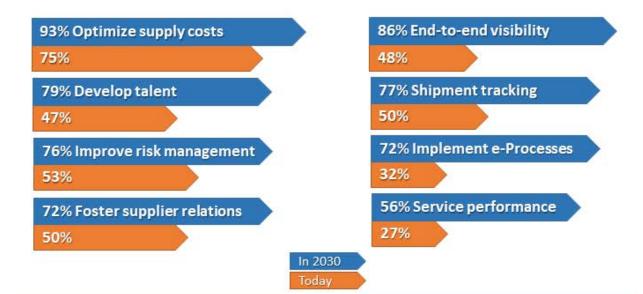
Organizational Priorities

SOURCING

LOGISTICS

Future vs. current supply focal areas

Future vs. current inbound logistics focal areas

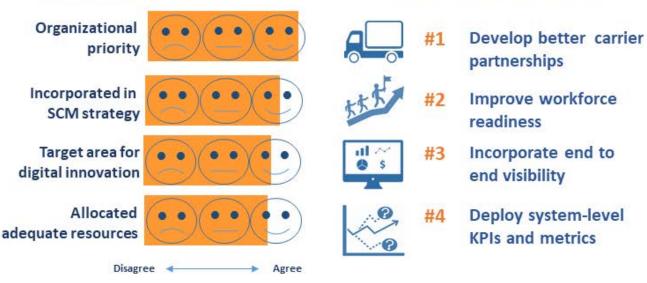


Future Perspective

Corporate Goals

By 2030, Sourcing will be...

By 2030, inbound logistics will ...



STRATEGIC SOURCING – CRITICAL CAPABILITIES

"Nothing costs the business more than the inability to serve its customers. You can't save your way to profitability. If you don't have supply, you can't make things and you don't deliver. That means you don't have a business."

The global pandemic and the resulting myriad disruptions has laid bare long-term vulnerabilities of supply management in modern times. This situation underscores the critical role played by sourcing and procurement in sustaining vital supplies for businesses, public institutions, and consumers.

Historically, sourcing and procurement has been seen as an organizational function tasked with managing purchasing costs. The future outlook of sourcing and purchasing looks quite different. Eighty-one percent of our survey respondents identify developing new sources of supply and ensuring business continuity as the primary sourcing and procurement capabilities that will be most useful in the future.

This outlook accounts for the near consensus among our study participants (93%) who describe the key attribute of their suppliers as being strategic partners. For that reason, 86% of the respondents state that they are focused on developing incentive schemes and shared processes to promote collaboration with their strategic supply partners.

The other key capability highlighted in our report is sourcing flexibility. Many supply chain experts in our focus groups share concerns about looming trade wars, perpetual supply shortages and global disruptions. These concerns have led to calls for developing flexibility through alternate sourcing strategies, such as using multiple sources of supply for key product categories (93%), investing in sophisticated analytics to reduce supplydemand mismatches (92%), and renewing their focus on domestic sourcing and near-shoring (81%).

To align themselves to these sourcing and procurement trends, organizations need a better understanding of the challenges headed their way. In this section, we present a detailed analysis of relevant sourcing and procurement issues and identify strategies to help prepare for future challenges.

CHALLENGES ABOUND

"A six week supply lead time is now 24 weeks. And that's just one of the many challenges in sourcing."

BUILT-IN VULNERABILITIES

"Supply chains have always been exposed to "what ifs". What if our supplier shuts down for two weeks? What if there's a global pandemic? Now we're seeing these "what ifs" happen and we're dead in the water."

Future Challenges: Business continuity, supplydemand mismatch, and supplier performance

Threats to Business Continuity

One of the top sourcing challenges identified in our report is the threat to business continuity. This concern, shared by 81% of our survey respondents, directs attention to the built-in vulnerabilities of the prevailing sourcing strategies.

"We are starting to realize that where we had three different suppliers for a category, they are all somewhere tied in to the same source. So, as we expand our collective supply chains to serve increasing demand, we will approach the limits of supply. We need to start thinking about better alternatives."

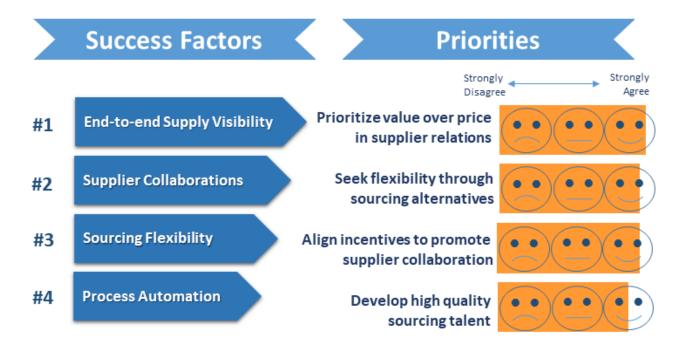
Today's hyper global market competition has forced many organizations to find ways to shorten the supply cycle. A go-to strategy in this regard has been to deploy supplier qualification protocols built around single sourcing. This strategy has been successful in reducing product variation, speeding up awarding contracts and lower administrative costs. However, its downside, i.e., the elevated supply risk, has many sourcing experts concerned.

Multiple discussions among our focus group respondents point to the critical need for strategic supply planning that generates solutions to these concerns. "We have to get smarter about understanding trade flows around the world. Not just think about single manufacturing source, but develop strategy that looks across all sourcing options." This outlook is also shared by a majority (67%) of our survey respondents who see poor sourcing flexibility as the big supply challenge in the years leading up to 2030.

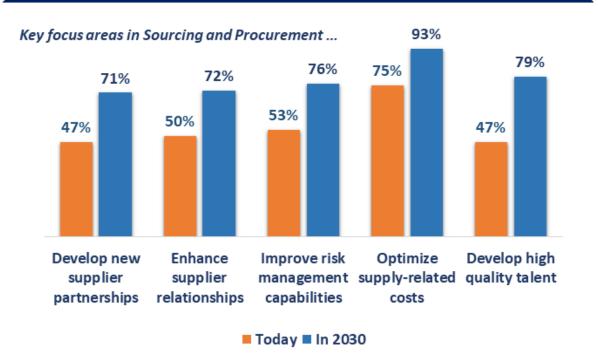
Deteriorating Supply-Demand Mismatch

At a strategic level, the concern about business continuity connects to another macro trend related to a growing supply-demand mismatch. With rising demand and constrained supply, the first causality is usually the cost of goods (94% of survey respondents agree) that eventually leads to higher

Sourcing and Procurement Issues



Current and Future Investments



consumer prices. Neither outcome alleviates concerns arising from a limited supply capacity (70% of survey respondents share this perspective). "We have this challenge of demand and supply mismatch that will continue to create a perpetual bullwhip effect." Interestingly, it is this trend that is making organizations look at options to explore and develop additional sources of supply, including near-shoring.

Taking account of the shifting landscape in terms of tariffs, supply shortages and other risks, more than 80% of our survey respondents believe that there will be an increase in domestic sourcing in the years leading up to 2030.

"Maybe the model ahead is one where there's an affordable level of contingency planning around local sources that results in security of supply and an affirmation of supply." This outlook is supported by a large majority (72%) of survey respondents who see a major increase in North American sourcing activity over the next decade.

Supplier Performance Management

The other key sourcing challenge highlighted in our study is supplier performance management. The key connection of this challenge with the strategic issues mentioned above is that ineffective supplier performance exacerbates risks in quality, cost and timeliness of supply. For this reason, 74% of survey respondents stated that supplier performance management will be a major challenge facing organizations in the future.

The elements of supplier management that will be become critical in coming years include: suppliers' production capacity, real time visibility of supply and logistics processes, and ethical/sustainability practices. To effectively manage the supplier base, organizations are developing programs to incentivize supplier communication and incorporate better process visibility. Sixty-one percent and 72% of survey respondents, respectively, indicate corporate investments in these areas.

The other key area of supplier performance management to focus is the expectation of ethical practices around labor, intellectual property, and sustainability initiatives.

SURVIVAL MODE

"If I could get one thing, it would be a good risk management process where we identify contingencies for supply. That will help me get out of all these situations requiring perpetual crisis management."

"As supply professionals, we must talk about the 3E's: economics, environment, and ethics in supply chains. We must assess our suppliers on these 3Es."

There is growing investor and consumer pressure to enforce trade regulations and promote ethical sourcing. Buyers must ensure that global supply partners are not abusing local labor in the quest for lower production costs or deploying business practices that harm the environment. "You don't want to wake up and find out there's a huge uproar that your supplier's packaging comes from an endangered rain forest that you didn't know about." The challenge for sourcing organizations is determining how to accomplish these goals when supply is constrained, and lead times are too long for supply chains to function properly.

There is an equal level of social pressure around reducing your carbon footprint and conserving the environment. These contemporary sourcing challenges are expected to be at the forefront in coming years. Sourcing professionals, in partnership with their suppliers, must adopt sustainable sourcing innovations.

Strategies and Tactics: Risk Management through Supplier Partnerships

"Our focus is no longer on driving value through lower costs. The value is to keep operations running. 100% of my team's time is spent making sure that we can get the materials to keep our billions of dollars of assets running."

This year's L-2030 report has identified business continuity, supply-demand mismatch, and supplier performance as the biggest challenges in the coming years. Based on these challenges, a large majority (65%) of our study participants believe that organizations need to make long-term adjustments to their procurement and sourcing strategies.

To help with such long-term planning, we asked sourcing professionals who participated in our focus groups and survey about the best way forward. The following discussion presents these strategies and tactics.

FINDING THE MIDDLE GROUND

"We are trying to strike that balance between satisfying the market demand and finding ways to conserve the environment. But we must balance the other side of these things like higher cost of goods."

Seat at the Table

As organizations become increasingly concerned about business continuity challenges, the attention of corporate leadership has honed in on the critical role of strategic sourcing and efficient procurement processes. Many organizations are treating the sourcing and procurement function as an organizational priority, as indicated by 93% of our survey respondents.

To fully leverage their collective supply chain capabilities, organizations are integrating sourcing and procurement processes into a broader corporate strategy, increasing its use from 73% to 92% among our survey respondents' organizations.

The new organizational priority is reflected in the higher level of engagement by sourcing professionals in new product development and portfolio decisions. "What we see is having a sourcing expert at the table in these ideation sessions. To say ... look, we can find this ingredient pretty sustainably pretty easily in all parts of the world. Let's create a new product where we can use this material, instead of having to reinvent the wheel. Let's start with something we know we can source effectively."

Another change in the business outlook is how organizations are beginning to view sourcing and procurement function in a different way. "Now when we talk about strategic sourcing, we're really talking about a new definition."

The new outlook goes beyond viewing procurement professionals as a group who beats down suppliers to the lowest price. It's more about people who foster collaboration and build relationships with supply partners that will yield solutions to shared problems. "Let's not just always be pushing for cheaper and cheaper. Let's add value using our relationship with suppliers who know more and can offer alternatives we can use."

Risk Management in Uncertain Times

The sourcing experts in our focus group and survey respondents are clear that the coming times call for a shift away from the low-cost, just-in-time practices of the last decade. Risk management in uncertain times requires corporate investments

NEW VALUE

"People have started seeing us as the one who understands a particular commodity vertical, one who fosters strategic relationships with suppliers. It's great when they come to you for help with developing new products."

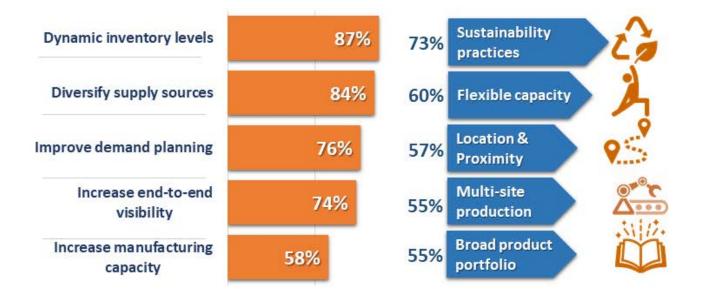
Strategies and Tactics

Risk Management

By 2030

Organizational strategy for handling risk

Top 3 criteria for supplier selection



Supplier Relationship Management Strategy



in better supply visibility (97% survey respondents agree) and automated information flows through e-Processes (84% agree). Both enable faster response when supply is affected due to shortages and disruptions.

"Smart sourcing is now becoming about the use of analytical tools that help people understand their supply chains from an overall sourcing model. And then use risk analysis tools to make decisions around trigger points where alternative sourcing strategies need to be deployed."

Our survey also identifies other risk management strategies that will be applicable in coming years. These include: dynamic adjustment of inventory levels (87%), diversified supply sources (84%), and more domestic sourcing (63%). It is interesting to note the identification of domestic sourcing as one of the risk management strategies in our survey results. The use of this approach makes sense for mission-critical supplies where a local, more reliable source can be leveraged to offset the impact of supply disruptions.

"With so many things that can go wrong, we need a different risk management plan about having a local alternative to outsource temporarily. There's so much uncertainty out there with supply and logistics, we need a backup plan, a plan B and plan C and sometimes even Plan D at this point."

Finding the Right Supply Partner

Organizations are increasingly relying on their suppliers to be a source of innovation to address future challenges. "Our sourcing relationships with our suppliers are absolutely changing and they're becoming deeper and intertwined. That's critical for the future."

This high level of reliance requires organizations to form buyer-supplier teams that work on developing new products, build supply plans from prototype to production, and devise innovative approaches for process improvements. These opportunities underscore the importance of fostering close supply partnerships as a critical sourcing strategy for the future.

ACTION PLAN

"Job number one now is a top-down risk analysis and capability assessment for each one of our vital components that go into manufacturing the final product, and understanding our alternative supply options for each one of those components."

A key element of this collaborative strategy is identifying best supply partners for your organization. We asked our sourcing and procurement experts to identify the necessary attributes of a supply partner. Their responses included: flexible manufacturing capability, location and proximity to ease logistics flow, and service quality. These attributes reinforce the outlook discussed above regarding business continuity and supplier performance. Notably low in the ranking of partner attributes was purchase cost.

"A good supplier relationship management program helps you segment your supply base and identify those that really are transactional. You don't need to invest nearly as many resources or time in developing close relationships with them."

Joint Ownership of Success

To ensure a successful buyer-supplier partnership, each side must make a commitment to shared success. This implies that when requiring suppliers to meet certain performance goals, buyers must ensure they are facilitating their suppliers' workflows and providing necessary support. "We will work with our suppliers to solve their supply and quality problems. We do this because our suppliers also bring a lot to the table for us!"

Building good supplier partnerships require both buyer and supplier organizations to articulate and gain buy-in to the value of joint ownership of mutual business success. It's only then that partnerships can deliver desired outcomes.

Our study indicates multiple approaches used by organizations to implement this strategy, such as: embedding a rep from the buyer organization in suppliers' operations (63% of survey respondents report doing so). Also, employing KPI dashboard to identify areas of improvement (54%) and holding regular performance review meetings to find workable solutions (50%).

Organizations also report investing in capabilities to improve their internal procurement processes. These investments include: implementing supplier management software (79% of survey respondents indicate a higher use of this tool by 2030), using analytics for reviewing supplier performance (73%) and conducting spend analysis (67%).

WE'RE IN IT TOGETHER

"We support our suppliers and not punish them when they have a late delivery or poor quality, but try to find solutions with them."

Technology Outlook: Efficiency, Speed, Accuracy

"In my experience, purchasing and sourcing groups are doing much more tactical work than you would expect at this point in the evolution of strategic sourcing. So I think technology is really important from the sense of anything that you can automate allows your team members to focus more on value and not on those administrative things."

Our survey results indicate a near consensus among sourcing and procurement professionals about technology adoption in this organizational function. Owing to a slow start in this area compared to other areas of their organizations, sourcing professionals believe that there is much room for technology to help improve efficiency and the speed of procurement processes (76% of survey respondents agree), improve information accuracy (76%) and maximize human value by automating routine procurement tasks (67%).

Therefore, organizations are planning to make significant investments in deploying procurement technologies and analytics applications. Looking toward 2030, our study finds that organizations will deploy technology for spend analysis, requisitioning, setting up contracts and the eventual purchasing of products. Though currently still in a growth stage, such technologies are expected to advance to maturity as we approach the next decade.

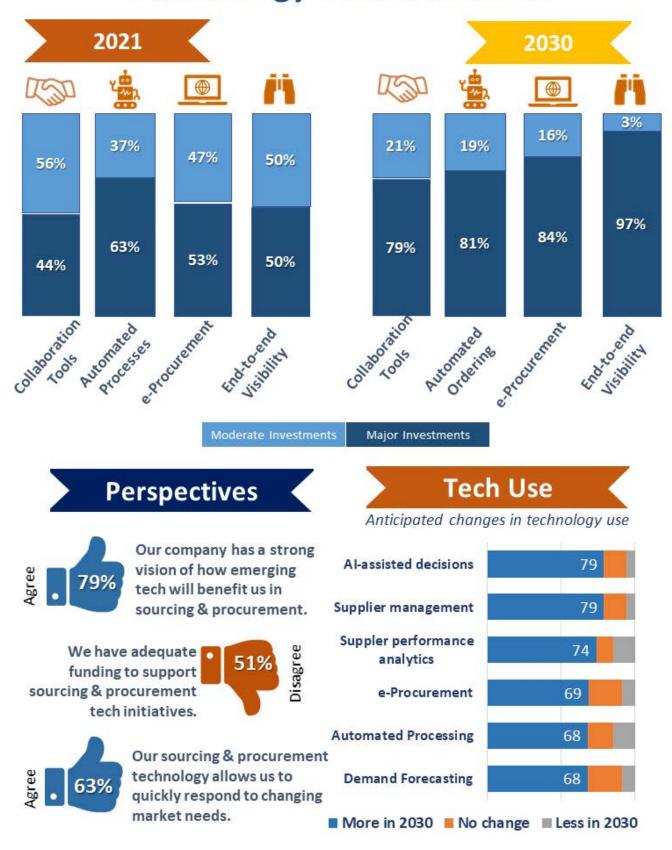
Closely following e-Procurement as the top opportunity for technology deployment are artificial intelligence (AI) and machine learning (ML) applications. Our survey results show that while the use of AI and ML applications in sourcing and procurement is still in its early stages, these technologies will see a rapid increase in use by 2030.

Typical applications of AI and ML in sourcing and procurement include: supplier selection decisions for routine purchases, procurement analytics, spend analysis, and supplier performance management. A similar increase in use is anticipated in blockchain technology to help automate buyer-supplier information exchange and provide supply chain transparency.

NEED OF THE HOUR

"Technology is no longer just important for Fortune 100 companies. It's a need for anybody that has a complex supply chain. It has become a critical part of your sourcing strategy."

Technology Considerations



"We used to think that traditional API connectivity provides sufficient visibility to our inbound supply chain but that's clearly not the case anymore. We are going to rapidly move from an effort to look for our stuff all the time to where we can readily know where things are. Right now, we're not there, but I think by 2030 that will be off the table giving us broad visibility about where our products are all the time."

Due to the increased complexity and growing frequency of supply chain disruptions, the overwhelming majority of our survey respondents believe that supply chain digitization (80%) will be critical for organizational success in the years approaching 2030. A major benefit expected from these technological advances is allowing procurement employees to maximize their value by focusing on strategic issues.

"So I think technology is really important from the sense of anything that you can automate allows your team members to get off those administrative and technical things. And focus on more value driven activities like business continuity planning and strategic sourcing. All of those things will help us make sure that we're spending our time on things that matter, especially during uncertain times."

To leverage these technological innovations, organizations need to develop a solid digital strategy for sourcing and procurement. Such a strategy must be built around facilitating buyer-supplier interactions. This means building digital connectivity where all parties can share and access data and information, encouraging collaboration, and improving supply chain visibility. A digital sourcing and procurement strategy may also include investments to build market intelligence and predictive analytics capabilities. Tracking shifts in forecasted demand and adjusting purchasing patterns will avoid unnecessary consumption of constricted supply capacity.

The other important aspect of the digital strategy will be to build a managerial talent pool that is trained to realize the full benefits of these new technological capabilities, both individually and as an enterprise. This will be especially critical in the next ten years as organizations' technology capabilities become more mature, less cumbersome, and readily accessible.

WORK SMARTER

"We've automated our processes to free up team members. Now they are more geared towards strategic work: To look at waste in the process, to use spend analytics and predictive analytics."

Talent Management: Art and Science of Relational Management

"We see procurement professionals as being more than someone that can beat down a supplier to the lowest price, but someone who can spark collaboration, and build the relationships to help us move ahead."

Our survey asked respondents to identify the key sourcing and procurement managerial skills that will be most needed in the coming years. Their response: ability to make complex decisions, ability to leverage data and information, and a high sense of business ethics.

"The future sourcing manager must not only be smart about sourcing practices, but also accustomed to information automation so that they can be more productive by focusing on big-picture tasks that really are meaningful and create value."

We asked our survey respondents to identify relevant technical skills for sourcing and procurement managers. The skill that tops the list (picked by 61% of survey respondents): the ability to work with technology applications.

This technical skill will become more relevant as organizations continue to modernize the procurement function through investments in technology to automate procurement processes.

An important personality trait that was repeatedly mentioned as critical for the future sourcing leadership is intellectual curiosity. "You've got to be curious about what's going on in the industry that will make you successful because this industry is changing rapidly. If you don't keep up and if you're not curious, I'm afraid you're getting left behind."

Another key skill that was highlighted by sourcing experts is fostering supplier relationships. "The generation coming out of college right now is the most technologically gifted that we've seen. But in a procurement career, it's also about relationships and being able to talk to people and communicate and find that common ground, whether it's for cost negotiation or working on deliveries or (supplier) development. That's really what we need more of."

BUILDING RELATIONSHIPS

"Think of what you can bring together through the art of collaboration – to ensure that your suppliers understand that we win together, not by ourselves, but all together. Make sure the incentives are aligned around that. Now that's a model for a future leader."

Talent Outlook

Key Skills for Future

Retention

Future talent retention strategies



Current and Future Technical Skills



Given the importance of developing these management and technical skills in the future leaders, it is a grave concern that organizations report facing difficulty finding requisite talent.

Our survey respondents overwhelmingly (82%) agree that recruiting and retaining sourcing talent is their top challenge for the future.

To address this issue, organizations are focused on attracting high caliber candidates to this profession by offering flexible work schedules and enhancing employee's sense of work/life balance to improve the retention rate. Organizations are also looking to increase training opportunities for the new hires and offer additional benefits such as better medical coverage and more paid holidays.

KEY TAKEAWAYS

In the wake of COVID-19, changes to sourcing and procurement practices have arisen largely out of necessity. However, the strategies developed to respond to the global challenges will chart the course for the next decade.

Organizations seek suppliers that are responsible and agile, thereby highlighting the value of building and fostering collaborative buyer-supplier relationships as a critical organizational capability that will be key to success as we approach 2030.

Such collaborations will naturally require sharing of information to build trust. For that reason, supply chain digitization and related technologies are slated to increase in value, especially in terms of enhancing end-to-end visibility. These technologies will allow for faster flow of information and thereby more informed decision making.

Sourcing leaders in 2030 will need a thorough knowledge of the products, a mastery of technology and the ability to use data for decision-making. Moreover, they'll need to leverage the soft skills of communication and relational acumen to find and maintain mutually beneficial partnerships with their strategic supply partners.

LEADERSHIP DEVELOPMENT

"I think the biggest piece is a bona fide leadership development program. This level of mentoring I think is really important where they learn about the whole business and then come over to manage sourcing and procurement."

INBOUND LOGISTICS – CRITICAL CAPABILITIES

"First, we tried to stop all our freight coming from overseas because we didn't want it to sit in the warehouses, and then we couldn't recover fast enough to get it here when we did need it. And then all of a sudden we can't get capacity. It's just been one bizarre situation after another."

Challenging times are often inflection points where organizations make necessary course corrections to remain successful. Inbound logistics is in the midst of such an upheaval that will require significant course corrections. Ocean carrier alliances are upending the traditional rules of engagement with shippers, while port delays and terminal operation congestion indicate a need for systematic overhauls. On the domestic front, shortages of drivers and transportation capacity are issues that have reached a pandemic level of their own.

Our inbound logistics focus group conversations highlighted a number of issues. Key among them are: port congestion and maritime shipping capacity. Both these issues have been highlighted on the national stage owing to recent demand spikes and supply-side volatility. The strategic nature of these issues and their broad impact on the entire organization is what led 89% of our survey respondents to state that inbound logistics is now considered an organizational priority at their workplace.

This increased level of awareness is bringing into focus how organizations intend to manage their inbound logistics strategy. Eighty-five percent of the survey respondents say that their organizations are refining business goals to reflect a higher level of corporate attention on inbound logistics outcomes.

A majority (83%) of the organizations are in the process of developing better metrics to monitor the performance of not only their internal operations, but also their transportation and logistics partners. Around two-thirds (77%) of survey respondents report an expected increase in corporate funding and more resources to implement these organizational priorities in the coming years.

RELIEVING STRESS

"There is a lot of stress on our carrier network, and there's a lot of stress on suppliers production. And those two things combined, create a pretty stressed system overall."

Future Challenges: Capacity, Service and Power-play

Capacity Shortages = Higher Freight Rates

"I'd say the blinking red light for us is capacity. Procuring and securing affordable freight capacity is our number one challenge"

The transportation capacity crunch has been many years in the making. The beginnings of this logistics crisis date back to the volatile economic conditions of the past decade.

After losing one-fifth of national transportation capacity during the Great Recession, carriers have remained cautious in fully rebuilding anticipatory capacity. Further fueling this situation is the ongoing truck driver shortage. Collectively, they create a perfect storm for the inbound logistics industry.

In addition to road transportation woes, inbound logistics professionals are also concerned about maritime transportation. All participants in the inbound logistics focus groups shared their concern about tight ocean transportation capacity. Many steamship lines have curtailed their sailing schedules, which has resulted in inadequate shipping capacity leading to organizations' "inability to move things as fast as we would like."

The outcome of this situation is that shippers are paying far more than what they consider reasonable. The current situation was declared a "profitability death trap" by our focus group participants. We notice a similar sentiment among a large majority (70%) of our survey respondents who identify freight rate volatility in maritime transportation as a major problem.

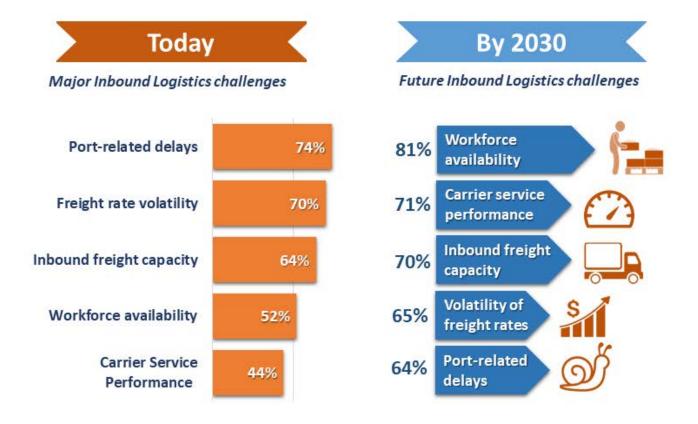
Limited people and equipment capacity often lead to rapid price escalation, which is occurring in maritime transportation. The current rate situation makes it harder for organizations to keep freight flowing at palatable costs.

Many professionals signaled that today's inbound capacity and rate dynamics will persist through 2030. Among the survey respondents, 81% placed workforce availability in their top three future concerns. The related issues of inbound capacity (70%) and volatile freight rates (65%) also are also worrisome issues going forward.

RIPPLE EFFECTS

"What do you do when you can't move freight because carriers don't have capacity? It's not that it just creates problems for us in the inbound side, these problems ripple through the entire supply chain."

Inbound Logistics Issues



Areas Needing Improvements



Service Challenges

Related to the capacity challenge is the decline in carriers' service performance. Nearly half of the survey respondents identify it as a major inbound issue today. It is an even bigger concern going forward, with 71% of survey respondents including it in their top three challenges for 2030.

Sub-par service performance is not just about late shipments or effort spent in settling unnecessary claims. A key concern is that inbound service failures create supply chain stress and disrupt the organization.

A primary contributor to inbound service failures is portrelated delays. Seventy-four percent of survey respondents indicate delays at the ports as the primary reason for poor service outcomes today. Nearly two-thirds of them expect port-related delays and terminal container handling capacity to persist into the next decade.

This situation is especially worrisome because port congestion and related delays spill over into other transportation modes.

"In most cases, the shortest route from China goes through Southern California. This means that we dump a lot of domestic shipping volume on to intermodal rail. Any delays at the port stresses railroads and in-land truck movements as well."

Carriers' Power-play:

Another issue at the top of inbound logistics professionals' minds is the long-term trend of consolidation in the transportation industry.

At this time, global logistics flows are managed by a handful of carriers. In the U.S., intermodal rail is dominated by four rail companies, whereas the ten largest steamship lines now control 80% of maritime shipping (compared to 12% in 2000). This level of consolidation is dynamically shifting the balance of power between shippers and carriers.

BECOMING COMPETITIVE

"Over years we have done so little to diversify our port infrastructure. To me that just flies in the face of what United States has always been about ... competition and striving for excellence. And to me it just doesn't feel like we're striving for excellence."

"How the carriers are managing these dynamics is what's changed. The alliances formed in the global container shipping industry has led to more control over capacity and pricing. The carriers have gotten very good at controlling these things."

By controlling capacity, steamship lines have created a huge market leverage to drive up prices.

"Usually, they have not been a disciplined group. Not anymore. Just shows that all the new alliances now has the power to hold prices up, and I think it's here to stay!"

As a result, ocean freight costs have gone up as much as 60% to 75% compared to pre-COVID times. Such a power shift means that shippers have reduced leverage to negotiate lower rates and acquire capacity at favorable terms.

At the same time, carriers are displaying their newfound market power. "It's not uncommon that we would have 15,000 pounds LTL shipments. Well ... LTL carriers now won't take more than six pallets or 10,000 pounds, so that's definitely affected our shipping practices."

Such a market outlook does not bode well for shippers. Many fear that carriers will not quickly add capacity and reinstate the balance of power. Less leverage means less opportunity for lower freight rates.

Pressure on Inbound Warehousing:

The transportation capacity and freight rate situation has put pressure on the inbound warehousing facilities as well. Owing to transportation capacity volatility, many organizations are adjusting their inventory replenishment policies.

"We're quickly realizing that we need to bring goods in sooner. So we're going to carry larger inventory to help try to offset this increase in delays and costs."

But, such approaches put a lot of pressure on warehousing facilities and require organizations to finance more capital to secure additional storage capacity.

A DIFFERENT TUNE

"We didn't use to have much warehousing space. But we can't just keep spending so much on freight. We need more space. So pushing for it was a hard sell previously. Now, not so much!"

Logistics professionals are facing similar challenges in planning their first-mile logistics (warehousing and shipping at the point of origin). This situation is especially critical in industry segments that rely on an efficient reverse logistics system that re-circulates shipping containers to origin points around the globe.

"Our Asian suppliers have 90% of their finished goods go straight into a container. Our inability to get them empty containers is hurting our inbound process."

Adding to the inbound logistics managers' transportation capacity and warehousing pressure, carriers are adopting and enforcing shorter container dwell time rules.

"You know those alliances are flexing their muscles and saying great I'm going to make you turn this box in four days now. This will completely change inbound logistics of our entire business."

The required turnaround time for an incoming container is now measured in days rather than weeks. To meet the new turnaround rules, organizations are securing additional warehousing and cross-docking capacity. While penalties for detention are avoided, the organizations often incur added inventory handling and storage costs.

Strategies and Tactics: Leveraging Collaborations and Better Strategic Planning

Controlling Transportation Costs

In an effort to achieve lower transportation costs, 80% of our study participants are adopting a more integrated approach to transportation management. Implementation of this strategy involves using business analytics to review rates and shift inbound volume between modes or make greater use of intermodal transportation.

Other elements of the integrated approach include consolidating shipments for volume discounts (83% of survey respondents) and optimizing routes and load configurations (67%). The goal is to slow the pace of rate growth and avoid the need to raise product prices to customers.

CAUSE AND EFFECT

"I think carriers have learned that if they control capacity, they can raise freight rates and make a lot of money. Their pricing power is causing our costs to go up."

Another tactic highlighted by study participants to control inbound transportation costs is the use of predictive analytics. When selecting carriers and logistics service providers it is imperative to assess how much volume they can handle.

"Allocating multiple loads to a carrier solely based on freight cost is short sighted. What needs to be factored in is what volume exceeds a carrier's capability. How much more expensive is the ninth and tenth load that you have to get these to another carrier to haul? Once you factor that in, would it have been cheaper to use a different carrier than the one that had the lowest rate?"

Leveraging Logistics Partnerships

Fostering long-term collaborations with carriers and third-party logistics (3PL) service providers is a central strategy for combatting constrained capacity. "We continue to see the need for direct engagement and strategic long-term planning with carriers."

This focus on logistics partnerships is tied to the widespread belief that the capacity crunch is not temporary. With the majority of survey respondents indicating that the situation will continue or get worse in the years leading up to 2030, it is imperative to be a shipper of choice for carriers. Doing so with partner carriers will improve inbound transportation managers' abilities to secure freight capacity at the best possible combination of rates and service.

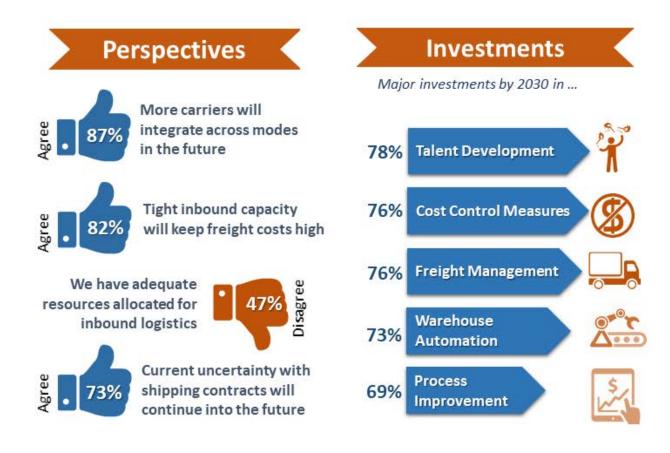
"Carriers are becoming more selective, especially on the ocean side, becoming more selective in terms of who they're giving capacity to ... and if they forsake some customers because of that, so be it."

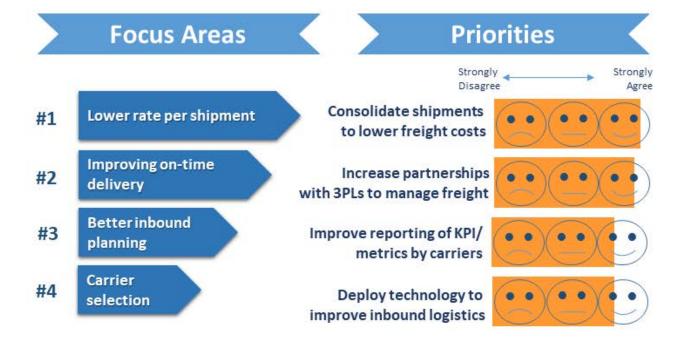
To manage this issue, 82% of the survey respondents' organizations are aggressively pursuing efforts to build long-term partnerships with transportation carriers. Organizations are also reaching out to third-party service providers to manage freight, provide

A FRIEND IN NEED

"Whenever the business dynamics change, you end up relying on your strategic relationships. And that's what we will continue to do with our transportation partners."

Strategies and Tactics





dedicated transportation, and secure needed warehousing capacity.

A Holistic Review of Supply Chain Strategy

Owing to carriers' current power and a bleak outlook for transportation and port capacity, inbound logistics professionals should adopt a holistic review of their sourcing and inbound logistics strategies. This involves total cost and tradeoff analysis that may lead to consideration of sourcing location modifications, including near-shoring and domestics sourcing.

"If container prices are going to stay at \$5,000 per move, the math is a lot different for us to evaluate other sourcing alternatives, may be in the US and Mexico."

Another option is to diversify maritime shipping routes to avoid congested west coast ports. Expansion of the Panama Canal makes it more viable to move product to Gulf and east coast ports. However, this strategy will require continued investment in waterways and port infrastructure expansion to avoid a similar congestion problem as the west coast ports.

The two strategies should be considered in tandem as new sourcing locations typically require transportation service and route modifications. Current efforts to expand sourcing beyond China present a timely opportunity for inbound professionals to rethink routing.

"We are at 65% reduction in China from three years ago. There has been a big shift to other countries that has opened up more inbound logistics options for us."

Acknowledging the need to create synergies across inbound logistics and sourcing functions, organizations are working on improving communications between the two groups.

"We are now better integrated with our sourcing teams and not operate in our functional silos. We discuss logistics challenges and say what do purchasing need to do to help."

Such a collaborative outlook will help organizations pursue innovative solutions to the issues discussed above.

CONNECTING THE DOTS

"When you're going to have a three day service on a lane instead of two days, there will be more delays. Our purchasing group wants to know these things to factor into sourcing decisions."

Technology Outlook: Power of Analytics

"The chaos that has ensued because of what's going on these days has made it easier to get the finance executive to sign off on an investment to build our digital capability."

The inbound logistics side of the supply chain is ripe for technology infusion. About 93% of our survey respondents identify inbound logistics as fertile ground for digitization and technology applications in the coming years.

The Top-3 benefits identified by our survey respondents for using technology in the inbound logistics processes, include: automating manual processes, improving shipment visibility, and an improvement in process speed and efficiency.

A key area where technology is expected to play a big role in the future and is expected to receive significant investments by many organizations is carrier selection.

"There are hundreds of carriers, so how do you know who's the best carrier to haul your freight is? It's not that hard to see who has the best rate, but we want to know who can provide high quality and reliable service."

Another key area highlighted by our study participants that is primed for technology applications is automating manual inbound logistics processes.

"We're still running on excel and phone calls which is really not a way to run the business. It's not feasible down the road that we're still relying on "who do I know in the industry that I can call and get answers on what's coming next or what's happening?"

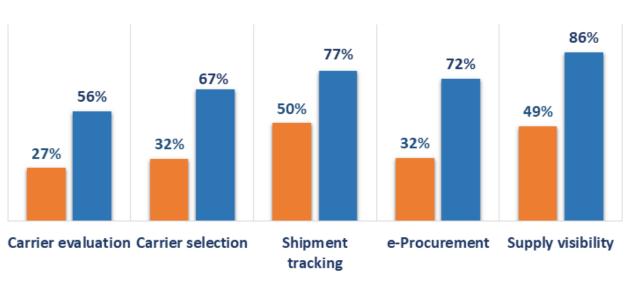
Technologies that can address these issues at a reasonable cost will gain widespread adoption. For that reason there is great anticipation for technology adoption by 2030. Nearly 8 in 10 respondents anticipate acquiring predictive tools for risk assessment and analyzing freight rates. Other logistics applications where technology is expected to increase in use include: carrier selection tools (79%), optimizing shipping routes (77%), carrier score card performance reviews (77%) and intransit shipment visibility (77%).

WHERE'S MY SHIPMENT?

"I resisted using technology until we got to the point where we didn't know where our stuff was. So moving forward, that's a key priority for me in terms of building the visibility capability."

Technology Considerations

Technology Investments



■ Today
In 2030

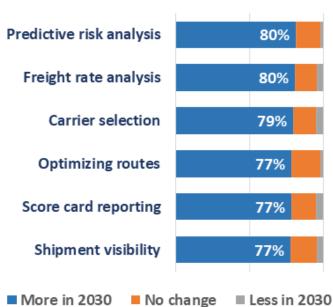
Benefits

Top-3 benefits of technology in inbound logistics:



Adoption

Anticipated changes in technology use



A critical future technology where large investments are needed is global network visibility. The vast majority (86%) of survey respondents indicate plans to pursue greater supply visibility over the next decade.

"It's not just about your shipments that you see, but you can see globally all the freight movement out there. If I'm shipping routinely one way and there's another company shipping the other way, then we can combine these moves in a collaborative way."

Such applications are available today, *albeit* at a premium cost for the users. Most companies' budgets cannot handle these costs. Thereby, it's essential that technology innovations continue to reduce the cost to allow for more organizations to afford these impactful tools.

Talent Management: Multi-skilled Professionals

"What we used to manage manually has now gotten so much more analytical. So understanding all the different ways you can slice and dice data is a necessary managerial skill."

As highlighted throughout this report, inbound logistics is getting more complex by the day. This complexity requires developing management talent that is skillful at managing data and has the competence to develop meaningful insights and actionable information.

Our focus group participants stressed this critical capability. "The future inbound logistics manager will be an information-driven decision maker, rather than simply overseeing task-driven execution."

The need for an expanded skill set is essential for future inbound logistics, according to the L-2030 participants. "We need multi skilled people. It's not that you can have this person who is good in analytics and this other person

that is really good at operations, that is really good at project management. The time is coming when we need them to do all of it."

SKILLS OF THE FUTURE

"The logistics talent needs are becoming more and more about data and information. Someone who's able to decipher what data means, and then know how to act on that information in the physical space."

Talent Outlook

Management Skills

Future inbound management skills

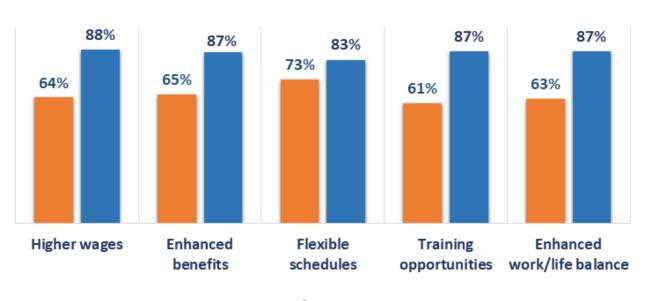
Technical Skills

Most desired future technical skills





Retention Strategies



■ Today
In 2030

The expanded skill set requires inbound logistics professional to have a strong blend of decision-making and critical thinking skills to supplement their operational know-how and communication capabilities.

The need for a broader skill set among inbound logistics professionals occurs at a time when most organizations are struggling with recruiting and retaining talent.

The survey responses indicate that both recruiting and retaining (71%) inbound logistics talent is an ongoing concern. Fifty percent of the respondents state that availability and readiness of logistics talent will become an even bigger issue by 2030.

For young supply chain professionals seeking leadership roles, the current shortage of talent in the inbound logistics field creates many opportunities.

To attract and retain the next generation of inbound leaders, organizations will boost wages (88%) expand training (87%) and offer flexible schedules (83%).

KEY TAKEAWAYS

Inbound logistics has never been more complex. The cost and capacity challenges are expected to continue long after the pandemic subsides. Inbound professionals must diligently adjust their tactics and pursue new innovations.

Strategically, a balanced focus on cost and service is required. Inbound managers must take a holistic look at their freight, seeking opportunities to benefit from consolidation, carrier partnerships, and mode shifting.

Successful adjustment of strategies and processes will require extensive data to make effective decisions. Future investment in transportation analytics tools to assess options and visibility tools to monitor flows is needed.

Also needed is the right talent to develop and implement change. Going forward, decision makers will need a strong mix of data science and people skills to effect positive outcomes in the inbound area.

GROUNDED IN FUNDAMENTALS

"Logistics is still a physical world. You need people to be also grounded in the understanding of labor management, the physical movement of goods, and know how that all works."

LOOKING TOWARD 2030: YOUR SOURCING AND INBOUND LOGISTICS ACTION PLAN

Recent times have demonstrated the critical role of strategic sourcing and inbound logistics in the modern supply chains. The impact of trade wars, pandemic-driven demand swings, supply shortages, port congestion and related delays are precursors of the complex times to come.

Based on the findings from the L-2030 Strategic Sourcing and Inbound Logistics Study, we present the following key action items to ensure that sourcing and logistics professionals will be prepared for future challenges.

Action Item 1: Focus on collaborations and relationships

Risk mitigation has become the cornerstone of recent sourcing strategies. Our report indicates that this strategy will continue into 2030. The best way for organizations to implement this strategy is to leverage their collaborative partnerships with suppliers and inbound transportation carriers. Fostering these relationships will help organizations build partnerships that can add value through innovation and superior service.

Action Item 2: Leverage technology for decision-making

Technology is a valuable resource for enhancing managerial value by automating routine tasks, allowing managers to focus on strategic and relational goals. Organizations can deploy artificial intelligence and machine learning applications to integrate corporate information and synthesize data for rule-based decision making. Incorporating these applications in sourcing and inbound logistics can improve productivity and conserve managerial resources for strategic initiatives.

Action Item 3: Incorporate end-to-end supply visibility

A successful execution of sourcing and logistics strategies requires end-to-end visibility. This requirement is no longer just conceptual, rather it is rapidly becoming a critical organizational need. Investments in digitization, as well as identification and tracking technologies, can improve data accuracy and real-time reporting of product flows.

MORAL OF THE STORY

"My biggest worry is that we aren't going to learn the lessons that we should learn from what we've been through this past year. We can't afford to be unprepared. Let's start getting ready for the coming times!"

Organizations need to link technologically with their suppliers and transportation carriers to incorporate visibility-driven initiatives that will benefit all parties.

Action Item 4: Invest in developing leadership of the future

To avoid a potential capability gap, organizations need to focus on developing multi-skill management talent. Future leaders need to be attuned to the science of technology and analytics. They also need to employ finesse and the art of fostering relationships to effectively collaborate with strategic supply partners and logistics service providers. Investing in leadership development programs that enhance such talents will pay huge dividends in the future.

Action Item 5: Learn from the past (present)

While the events of the recent past could not have been anticipated, the sheer lack of preparedness by so many organizations indicates a leadership failure in supply chain preparedness. Many experts in our focus groups share a concern that when things calm down after the pandemic, their organizations will go back to business as usual. Let's not allow history to repeat itself by being unprepared! Learn from the past and develop sound contingency plans. Don't wait until next disruption – be proactive now rather than reactive later!

The year 2030 may appear far away during the daily grind of 2021, but the foundational trends that will define the business environment in a decade are already in the works. Proactive and directed planning is needed to prevail in the business battles yet to come. Succeeding under these conditions requires investments in technology, talent development, and business process transformation. It is imperative to start that work now and develop innovative sourcing and inbound logistics strategies that will ensure your organization's continued success. Use insights from this report to build the requisite capabilities and get ready for the challenges headed our way by the year 2030!

KUDOS TO ALL

The Logistics 2030 study would not be possible without the input of sourcing and inbound logistics professionals. Their expert insights are the foundation of this year's L-2030 report.

Thanks to everyone who participated!

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