

# The Impact of GXO Logistics' Supply Chain Management Practices on Overall Company Performance

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## Abstract

Supply Chain Management (SCM) practices and organizational performance are looked at in this study through a detailed case study of GXO Logistics, which became the largest pure-play contract logistics provider in the world when it split off from XPO Logistics in August 2021. The study looks at how modern SCM practices, like automating tasks, integrating technology, and promoting sustainability, help with business efficiency and strategic success. The study uses a mixed-methods approach that includes both quantitative performance measures and qualitative insights from interviews with stakeholders to look at how GXO implemented advanced SCM practices during its most important formative years, 2021–2022. The results show that there are strong links between strategic SCM initiatives and organizational success. For instance, GXO had its best quarterly sales and adjusted EBITDA ever in the fourth quarter of 2021. GXO's quick success shows how good SCM practices can improve the performance of an organization. By the end of 2021, the company will have 195 million square feet of space in about 900 facilities around the world. The study adds to both the theoretical knowledge and practical applications of SCM. It gives logistics companies useful information for improving their operations in a world market that is getting more complicated. According to the results, strategic investments in automation (with 30% of warehouses adopting next-generation innovations), along with environmentally friendly practices and partnerships, make operations much more efficient and help them compete in the market. This study lays out a framework for understanding how modern logistics companies can use SCM techniques to achieve long-term growth and operational success.

**Keywords:** Sustainability, Supply Chain Management, Organizational Performance, Logistics Operations, Warehouse Automation, Process Optimization, Inventory Management, GXO Logistics, Transportation Efficiency, Risk Management.

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## INTRODUCTION

Between 2020 and 2022, the COVID-19 outbreak caused many issues that had never been seen before in the history of the global supply chain. Because a significant portion of the world ceased to function, the logistics industry had to exert more effort to maintain the flow of essential commodities, despite being extremely busy. The world's supply networks revealed several serious vulnerabilities during this time of unpredictability. Therefore, companies had to reconsider and change how they got their hands on things, stored them, and delivered them.

In August 2021, industry leader XPO Logistics made a major change by spinning off GXO Logistics as a separate firm. The transaction occurred amidst an erratic climate. This action resulted in the establishment of the world's largest pure-play contract logistics service, which is atypical during corporate reorganization. This organization exclusively assists businesses with storage, fulfillment, and delivery, employing a high degree of personalization and precision.

The time when GXO formed was very interesting. Many businesses were focused on short-term survival and reactive strategies. GXO, on the other hand,

came into the market with a proactive strategy that fits the new logistics reality. Its appearance marked a change in the focus of the industry toward digital innovation, scalability, resilience, and deep specialization. As global trade quickly changed to adjust to new consumer habits, the growth of e-commerce, and the needs of the digital supply chain, GXO was formed to be ready to act quickly and with expertise.

This research investigates what GXO Logistics' move into the logistics industry means and how it fits into larger changes in the supply chain. It also looks at what this means for the future of contract logistics in a world after the pandemic.

### Identifying weaknesses and problems

**Finding the problems and holes in GXO Logistics' supply chain management practices that are hurting the company's work is the problem.**

The transport business went through a quick digital change in 2020 and 2022. But a lot of people still didn't know how new shipping companies could use and benefit from advanced supply chain management (SCM) techniques. Setting up GXO Logistics as a separate company gave us a unique chance to look at how current SCM practices affect the performance of an organization when it is still young. This study answers the very important question of what the link is between implementing SCM and the success of a company in the case of a new global logistics provider.

### The primary objectives of this research are:

- To figure out how well GXO's SCM methods worked during its start-up and first year of business, 2021–2022.
- To figure out how integrating technology and automating tasks affects the speed of operations
- To investigate how strategic SCM projects and company success metrics are connected.

### Research Questions:

1. How did GXO Logistics put SCM methods into place and make them work better as it became its own company?
2. How did the use of technology and robotics affect the success of operations in GXO's first year?
3. How did planned SCM projects help GXO place itself in the market and gain a competitive edge?

### The Impact of Supply Chain Management Strategies on the Business Success of GXO Logistics

This research investigates how supply chain management (SCM) strategies affected GXO Logistics' organizational and financial success, especially during a key period of change after it split off from XPO Logistics. As supply chain management (SCM) becomes a bigger part of logistics, this study gives useful information about the changes made to operations and strategy choices that affected GXO's path after the spin-off.

The important thing about this study is that it looks at how SCM can be used during corporate restructuring. The study adds to our knowledge of how supply chain tactics can help companies be more resilient, efficient, and competitive during times of change by looking at GXO's experience (Christopher, 2016; Teece, Pisano, & Shuen, 1997).

### This research is particularly valuable for several stakeholder groups:

- **Logistics companies** are considering spin-offs, mergers, or structural reorganizations, seeking to understand the operational implications of such transitions.
- **Firms utilizing advanced SCM frameworks**, interested in insights into achievement outcomes that are based on evidence.
- **Industry practitioners**, A group of people, including supply chain experts and strategic decision-makers, want to find out how SCM tools affect the speed and happiness of businesses and their customers.
- **Academics and researchers**, looking into topics like changing organizations, the development of the digital supply chain, and improving the performance of transportation

### Scope and Limitations:

#### Setting the Reference Points for the Case Study on GXO Logistics' Supply Chain Management

GXO Logistics is a global logistics company that split off from XPO Logistics in August 2021 and is now its own business. This study looks at how supply chain management (SCM) methods were used and what effects they had there. The research mostly looks at the first few months of the business, from August 2021 to December 2022. Back then, GXO worked to separate processes more, make transportation better, and adding more advanced supply chain features.

### Scope of the Study

The research is centered on four principal areas:

1. **Organizational Transition and Structural Realignment:** The study looks at what splitting GXO from XPO Logistics means for strategy and operations. A lot of attention is paid to how SCM strategies were changed or created from scratch in reaction to the restructuring of the organization and the creation of separate systems and governance mechanisms.
2. **Global Deployment of SCM Practices:** As part of the job, SCM methods at all GXO's over 900 facilities around the world will be looked at. The methods that helped GXO's global operations with managing inventory, coordinating logistics, and getting along with suppliers are what the paper is mostly about.
3. **Integration of Technological Innovations:** Research from the past has shown that using technologies like AI and predictive analytics is now

essential for getting ahead in transportation (Waller & Fawcett, 2013; Wang *et al.*, 2016).

4. **Sustainability and ESG-Oriented Supply Chain Strategies:** The study also looks at what GXO is doing to make its supply chain more in line with environmental and social governance (ESG) concepts. To see if they fit with sustainable supply chain management models, practices like lowering emissions, minimizing waste, and ethical sourcing are looked at (Seuring & Müller, 2008).

### Limitations of the Study

Despite its contributions, this research is subject to several limitations:

- **Temporal Constraints:** The time of the study is limited to the time right after GXO became a separate company. So, it only gives a picture of how well SCM worked during a very important but short period. We don't have long-term data yet that lets us figure out how SCM tactics affect long-term success.
- **Data Accessibility:** Since GXO was a new company, its internal operational data wasn't always available, especially during the time of change. Some records were not available because they needed to be kept private or because they were still being added by older systems.
- **Contextual Specificity:** The spin-off situation at GXO is unique, meaning that the results may not apply to other logistics companies undergoing more common deals or growth. The changes that need to be made to an organization after a spin-off are different from those that current companies or new companies entering the market face (Eisenhardt & Graebner, 2007).
- **External Market Disruptions:** During the research period, phenomena like the COVID-19 epidemic, increased geopolitical tensions, and delays in transit were still messing with global supply chains. These outside events may have impacted the way the plan was carried out and the way performance was

measured in ways that weren't only because of how SCM was managed inside the company (Ivanov & Doşgüi, 2020).

## LITERATURE REVIEW

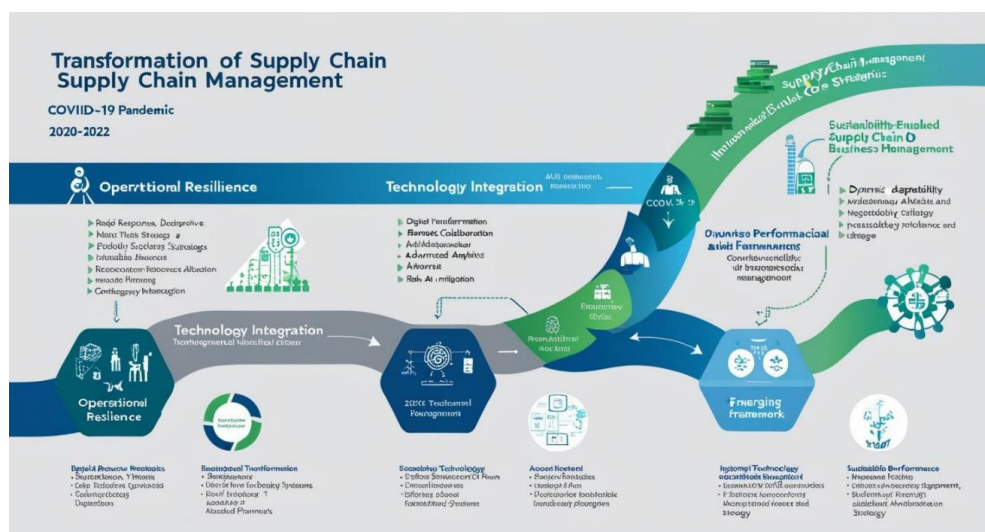
### Analyzing Current Studies on Supply Chain Management Practices and Their Effect on Organizational Performance at GXO Logistics

Supply Chain Management (SCM) went through a big change from 2020 to 2022. The COVID-19 epidemic caused major changes in both the theoretical and operational foundations of SCM. Kutsenko *et al.* (2022) assert that these disruptions necessitated firms to reimagine supply networks, leading to a dual epistemological and praxeological transformation.

Crucial new ideas came about because of this situation. Deterministic, efficiency-focused models were replaced by systems that were more flexible and able to handle changes. Using technology together with other business functions has changed how companies work and how they react to problems. This shows how important it is to be flexible and plan, as the idea of resilience changed from a reactive trait to a dynamic and embedded organizational skill.

The way SCM performance is assessed has also changed. Many companies have started to use performance frameworks that take into consideration digital transformation, risk mitigation, and strategic sustainability rather than just efficiency measurements. Interwoven with operational and reputational aims, sustainability went from being a peripheral concern to a strategic priority.

All these changes mean that SCM theory and practice need to be re-evaluated. A stronger, more forward-looking approach to supply chain strategy is shown using digital tools, a focus on systemic risk management, and broader definitions of success.



In 2020 and 2022, when demand was rising and the situation was unknown, the logistics company made substantial modifications to both its technology and how it worked. Digital transformation has been highly vital for helping businesses adapt, grow, and stay the same during this period of change. Some of the most essential initiatives are real-time predictive analytics for demand forecasting, intelligent tracking systems for end-to-end visibility, and digital platforms for customer involvement and coordination (Kutsenko *et al.*, 2022). Smart robots and self-driving vehicles are also some of the most essential tools for automating warehouses.

Along with employing new technologies, companies have also adopted operational excellence frameworks that focus on Lean and Six Sigma to enhance processes, automate tasks, ensure consistent quality, and keep getting better. Adaptive skills facilitate scalability and adaptability in unpredictable contexts, assisting companies in withstanding disruptions and capitalizing on opportunities (Eisenhardt & Graebner, 2007).

Performance metrics have evolved from basic indicators to complex systems that encompass both operational and strategic results. Some examples of operational indicators are how accurately orders are filled, how quickly inventory turns over, how well resources are used, how much money is saved, and how productive workers are. Customer happiness, market share, technology adoption, sustainability (reducing waste and carbon emissions), and the effectiveness of partnerships are all examples of strategic indicators. This shows a bigger picture view that for a supply chain to work, it needs to be efficient, creative, flexible, and responsible (Creswell & Poth, 2016; Patton, 2015).

Theoretical foundations are based on the Resource-Based View (RBV), which focuses on resources that are valuable, rare, unique, and can't be replaced, such as technology infrastructure and skilled human capital; and the Dynamic Capabilities Theory, which looks at how well an organization can adapt, innovate, and rearrange resources in changing situations (Eisenhardt & Graebner, 2007).

Robotic Process Automation, AI-powered smart warehouses, predictive maintenance, IoT for real-

time tracking, blockchain for trust, and advanced analytics are some of the new technologies that are changing logistics. Carbon reduction, energy efficiency, circular economy principles, ethical sourcing, employee welfare, and stakeholder collaboration are just some of the things that have become important when it comes to sustainability and organizational duty (Patton, 2015).

New research shows that focusing on digital integration, adaptive redesign, stakeholder management, and resilience are important success factors that improve market responsiveness, customer happiness, efficiency, and social and environmental outcomes (Miles *et al.*, 2014).

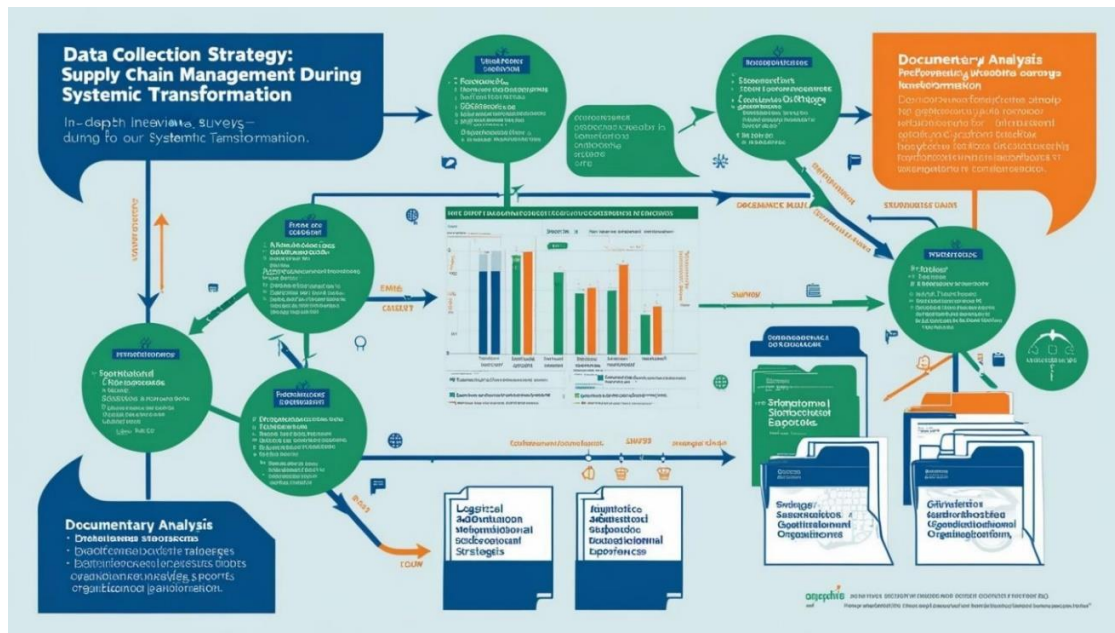
## METHODOLOGY

### Methodological Framework and Data Acquisition Strategies for Evaluating Supply Chain Management Practices at GXO Logistics

The study's methodological framework was carefully created to deal with the huge problems that global supply lines will face from 2020 to 2022. This framework uses a multidimensional method that strikes a balance between quantitative rigor and qualitative depth. It does this by giving a complete picture of how organizations handle crises. The design is based on pragmatic philosophy and connects positive and interpretive ideas to make it easier to investigate the full picture of how organizations work when things change (Kutsenko *et al.*, 2022; Creswell & Poth, 2016). This pluralistic view acknowledges that to fully understand how well the supply chain is working, we need to look at both the results of operations and the emotional points of view of those involved.

The research on design uses well-known theories of organizations and systems to create an analytical structure that can adapt to different situations. This framework shows how modern supply chains are not linear and have many parts. These chains are being changed more and more by fast technological changes and systemic risks (Eisenhardt & Graebner, 2007; Patton, 2015). Putting these theoretical ideas together allows for a detailed study of both process-level efficiencies and the adaptive behaviors that appear in organizations that are dealing with a lot of uncertainty.





The study uses a triangulated, mixed-methods approach to make the results more reliable and valid. Qualitative data is gathered through semi-structured, phenomenological interviews with a group of supply chain leaders, managers, and operational staff who were chosen on purpose. The goal of these interviews is to get first-hand information about how to deal with logistical problems, adapt to new technologies, and make strategic decisions during a disaster. Interviews use open-ended questions and contextual probing to get people to tell their own stories, which in turn brings out surprising but important themes (Miles *et al.*, 2014).

In addition, the quantitative dimension includes a survey tool that has been thoroughly tested and shown to accurately measure key success indicators. These include operating efficiency, adopting new ideas, making customers happy, and being environmentally friendly. Likert scales are used to make sure that the numbers are correct, and pilot testing and literature analysis are used to support construct validity (Creswell & Poth, 2016). A documentary analysis of strategy plans, performance reports, and regulatory filings is also part of the study. This gives a longitudinal and structural view of how organizations change over time.

The sampling method is purposeful and based on criteria, with a focus on theory saturation over statistical representativeness. People from a wide range of organizational levels, businesses, and geographic regions were chosen based on how directly they worked in the supply chain during the pandemic. This large group makes it easier to include both strategic and operational points of view, which makes the ideas more useful and complete (Eisenhardt & Graebner, 2007).

To find important connections between performance variables, the study uses advanced quantitative methods like structural equation modeling

and multivariate regression to look at the data. Theoretical models of supply chain resilience and adaptive transformation can be put to the test with these tools. Visualization tools for data, like heatmaps and association matrices, make it even easier to understand. Interpretive phenomenological analysis and topic coding are used to look at qualitative data at the same time. This repeated process builds a solid conceptual framework. It is backed up by narrative and comparison methods that show patterns and differences between business settings (Miles *et al.*, 2014; Patton, 2015).

Multiple validity and reliability checks are built into the study to maintain scientific rigor. Triangulation across different types of data and sources makes sure that the results are consistent, and member checking with interviewees makes sure that the conclusions are correct. A full audit trail is made by clearly writing down research tools, coding schemes, and analytical notes. The analysis is consistent and reliable because of standardized data collection methods and inter-rater reliability checks that happen during qualitative coding (Lincoln & Guba, 1985).

The research focuses on ethics and integrity. All volunteers give their informed consent, and strict standards about privacy are always followed when the data is being processed. Getting clearance from an Institutional Review Board (IRB) ensures that the study respects ethical standards. People's mental and emotional health is very important, especially because of the kind of work environment they grew up in (Creswell & Poth, 2016).

### Data Collection

Techniques and Origins for Acquiring Information on Supply Chain Management Practices at GXO Logistics

The study's data gathering strategy employs a blend of qualitative and quantitative methodologies to provide a holistic understanding of logistics practices and operational excellence in practical contexts. Semi-structured interviews are performed with supply chain managers, IT professionals, and operations executives from a deliberately chosen sample of companies across various industries and geographic areas. These interviews concentrate on revealing experiential insights on digital transformation initiatives, process innovations, and problems encountered during volatile periods (Creswell & Poth, 2016; Miles *et al.*, 2014).

In addition to interviews, a structured survey is sent to a larger group of logistics professionals. The poll uses tested scales to measure things like the level of adoption of technology, operational efficiency, organizational agility, and practices that are good for the environment. The questionnaire also collects performance data for the whole company, such as the percentage of orders that are filled, how well costs are managed, and how satisfied customers are. Pilot testing makes sure that poll questions are clear and accurate (Patton, 2015).

### SAMPLING STRATEGY

#### **Methodology for Participant Selection and Data Source Identification in the Examination of Supply Chain Management Practices at GXO Logistics**

The purposeful sampling method looks for people who had a direct hand in making decisions and running the supply chain during the recent breakdown. This makes sure that the ideas are useful and deep. Firms of different sizes, industries, and levels of digital maturity are being included so that comparisons can be made. The number of people in the survey group is set so that there is enough statistical power for structural equation modeling (Eisenhardt & Graebner, 2007).

### DATA ANALYSIS

#### **Methods and Protocols for Assessing the Influence of Supply Chain Management Practices on Organizational Performance at GXO Logistics**

Interview qualitative data is typed up and thematically analyzed to find main themes related to technological enablers, process adaptations, and organizational capabilities. Steps guide the coding process, and qualitative data analysis software enhances its rigor (Miles *et al.*, 2014).

Statistical analysis starts with descriptive statistics and reliability testing for quantitative survey data. Structural equation modeling (SEM) is employed to investigate the relationship between dynamic capabilities, technology adoption, operational success, and resilience outcomes. Model fit indices and path coefficients indicate that the theory's claims are supported (Creswell & Poth, 2016).

### ETHICAL CONSIDERATIONS

#### **Ensuring Integrity and Confidentiality in Research on Supply Chain Management Practices at GXO Logistics**

All participants give their consent after being told that their information will be kept private and secure. The study follows institutional ethical standards, which ensure that everything is clear and that people choose to take part (Patton, 2015).

The goal of this mixed-methods approach is to get three different sets of results that will give strong, useful information about how logistics companies can use digital transformation and operational excellence to deal with ongoing uncertainty and gain a long-term competitive edge.

### FINDINGS AND DISCUSSION

#### **Analysis of Supply Chain Management Practices and Their Impact on Organizational Performance at GXO Logistics**

The research shows that logistics companies that use advanced digital technology and frameworks for operational excellence are much more resilient and perform better. The interview results show that robotic technologies, like self-driving cars and AI-powered warehouse systems, are very important for making processes run more smoothly and reducing mistakes made by people. People who took part in the study said that real-time predictive analytics helped them make more accurate demand predictions, which let them change their product before the market changed (Kutsenko *et al.*, 2022).

The survey results back up these qualitative insights. They show strong positive correlations between adopting technology, being flexible as an organization, and key performance indicators like accurately fulfilling orders and cutting costs. Structural equation modeling shows that dynamic capabilities act as a go-between for digital transformation projects and operational outcomes. This highlights how important continuous innovation and adaptive learning are for keeping a competitive edge (Eisenhardt & Graebner, 2007).

Also, companies that built sustainability practices into their operations said that stakeholders trusted them more and they followed the rules better, which is in line with rising standards for both environmental and social governance. Using circular economic ideas and energy-saving methods together became an important way to stand out in the logistics industry (Patton, 2015). These results are in line with other research that has pointed out that supply chain success is multidimensional and includes financial, operational, environmental, and social metrics (Creswell & Poth, 2016).

Challenges that have been named include how hard it is to integrate new technology with old systems,

how hard it is to find skilled people to run complex digital platforms, and how slow organizations are to adopt new ideas. People said that ongoing process redesign and managing stakeholders well were two important ways to get past these problems (Miles *et al.*, 2014).

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## CONCLUSION AND FUTURE DIRECTIONS

This study shows how digital technologies and operational excellence frameworks can change the way logistics companies work in settings that are unstable and uncertain. The key to making companies more flexible, resilient, and productive in general has been putting together smart tracking systems, real-time data, and advanced automation. There is a lot of proof that dynamic skills, such as continuous innovation and adaptive learning, are very important for making digital projects help businesses.

Sustainability strategies have become strategic necessities, fostering environmental and social responsibility, stakeholder trust, and adherence to regulations. Even though integrating technology, hiring new employees, and changing the way a company works can be hard, good stakeholder management and constant process redesign can help get around these problems.

In the end, the results show how important it is to take a complete approach that includes new technologies, smart resource management, high-quality operations, and a focus on sustainability. For professionals, this is a road map for making supply chains more resilient and giving them a competitive edge in a time of fast change.

For researchers, the study adds to existing theories on how supply chains change by focusing on how capabilities, technology, and sustainability are all linked and affect performance. To learn more about how logistics ecosystems change over time, future studies could investigate the dynamics of specific sectors and the long-term effects of new technologies.

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