

OPTIMIZING LOGISTICS: THE IMPACT OF DATA-DRIVEN STRATEGIES



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INTRODUCTION

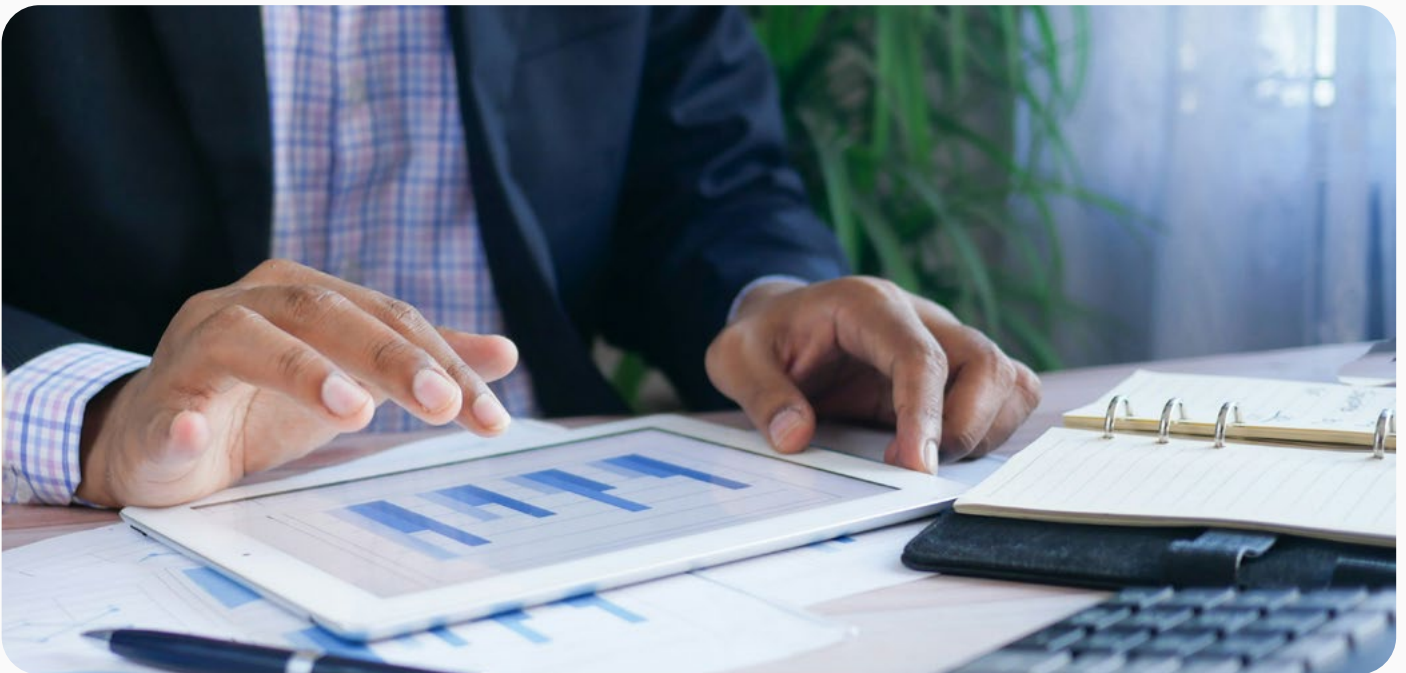
With new digital capabilities making large-scale innovation possible, the 'smart' supply chain is no longer a future ambition but is fast becoming the norm.

The right blend of data, technology, and understanding in modern transport and logistics can unlock increasing efficiency and driving costs down.

If you're reading this, you may have already seen many articles and reports talking about how to use data for a myriad of processes.



But do you know how to collect data and best utilize it to increase efficiencies in your business?



THE IMPORTANCE OF DATA IN TRANSPORT AND LOGISTICS

There is a growing awareness of the importance of collecting and using data to streamline operations in the logistics industry, but there are still a lot of improvements that can be made.

The 2023 State of Connected Operations Report found that 90% of business leaders said having accurate, real-time operational data is critical to decision-making and is a competitive advantage.¹ In fact, many transport planners still rely on Excel spreadsheets. One study reported increased safety (50%), improved compliance (50%), higher revenue (43%), and increased net profit (43%) as a result of investment in digital transformation.²

Result of investment in digital transformation



50%

Increased safety



43%

Higher revenue



43%

Increased net profit



50%

Improved compliance

Many companies avoid comprehensive data analytics due to inefficient manual data collection. Some leaders even hesitate to adopt new technologies. However, use cases show that digital data integration and automation can efficiently sift through large datasets, providing crucial insights for business improvement. For companies to benefit from the data they collect and use it to make improvements, it has to be meaningful. But with so much data from different partners, customers, carriers, vehicles, routes, locations and drivers, manual methods can be time consuming and inefficient.

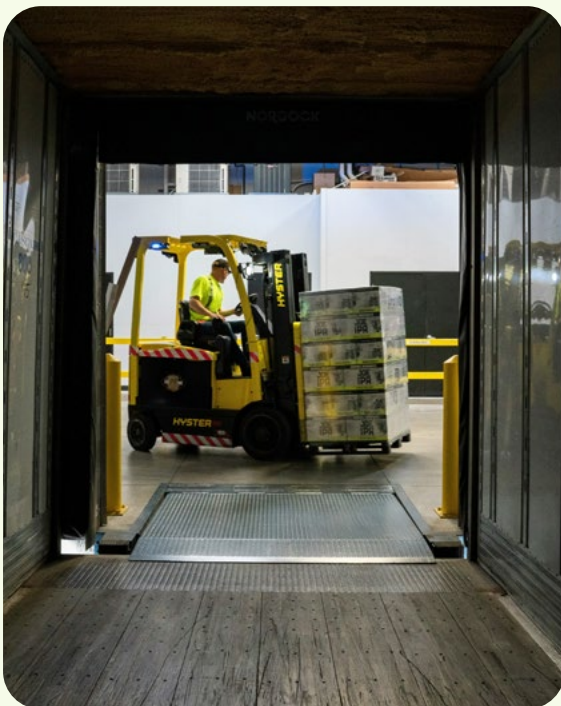


By utilizing emerging technologies in the logistics management space, data analytics can help companies optimize their operations by identifying process inefficiencies, reducing costs, and improving customer satisfaction.



STREAMLINING AND AUTOMATING DATA ANALYSIS WITH EMERGING TECHNOLOGY

Data analytics reveals patterns, trends, and correlations within large datasets, enabling more precise demand forecasting. Some companies find it difficult to collect, manage and analyze the vast amount of data their businesses produce. Utilizing emerging technologies that allow businesses to have comprehensive reporting and all-in-one data visibility is a key element in maintaining successful and streamlined operations.



By leveraging these technologies and comprehensive data analytics, companies can anticipate **fluctuations in demand**, **fine-tune production**, and **optimize inventory strategies** to minimize waste and shortages.

Transportation company Matex simplified its data sharing and expedited decision-making by partnering with CtrlChain, a logistics service provider that offers comprehensive reporting and analytics. With the transition to a more automated data analytics method, Matex was able to reduce payment timelines by 50%, reduced fragmentation and the potential for human error by having all its data in one place, and were able to grow their fleet size by 133%.



Result:

- Reduced payment timelines by 50%
- Reduced fragmentation and the potential for human error by having all its data in one place
- Were able to grow their fleet size by 133%

Payment timelines

50%

faster than before partnering with CtrlChain

Fleet growth

133%



With the CtrlChain system, it takes us minutes to manage all the information for one shipment.



10-20%

Increased forecast accuracy



15-30%

Improved planner productivity

Similarly, Blue Yonder emerged as a strategic partner for a leading clothing brand with subsidiary brands across the globe. Blue Yonder was able to leverage its comprehensive data analytics capabilities to help the company transform their demand

forecasting and planning. With Blue Yonder's solutions, the company experienced a 20% increase in planner productivity and forecast accuracy, reducing administrative overheads and manual work hours.³

Another supply chain software platform, e2open, helped transform the manual supply chain management of a leading global provider in data centers, communication networks, and industrial facilities. The company was using offline communications and disparate systems involving hundreds of suppliers and faced an emergent need for visibility across the many facets of its business. By leveraging e2open's connected platform, the company was able to pivot into a digital, data-based model, allowing them to communicate real-time on forecasting and empowering them to make proactive, evidence-based decisions.⁴ These changes improved efficiency and they met with the company's goals of improving growth, reducing risk, and freeing up manual and disjointed work hours to ultimately improve customer satisfaction.

Challenges:

- Offline communication
- Disparate systems involving hundreds of suppliers
- Need for visibility across the many facets of its business



Solutions:

- Digital, data-based model
- Real-time communication on forecasting
- Empowerment to make proactive, evidence-based decisions

Expenses



Revenue



Profit



Loss



Margin



Revenue - Expenses = Profit



FIGURE 3

Where data and analytics are driving value

Among survey respondents actively harnessing new data sources to improve analytics



QUANTIFYING SAVINGS AND EFFICIENCIES

Digital integrations automate routine tasks and streamline operations from warehousing and inventory management to transportation.

Transportation expenses rank among the largest costs for big companies. However, instead of examining and automating manual processes to reduce these costs, these companies often just request lower prices from carriers. This puts carriers in a difficult position, as they are already grappling with low compensation.



Transportation expenses, while significant, present opportunities for companies to **optimize their spending**. Rather than solely focusing on negotiating lower prices with carriers, there's a chance to explore other solutions like **process automation**, which not only streamline operations but also **enhance efficiency**.

Investing in a digital solution to help automate processes that businesses may still be doing manually can present as a significant initial investment - this may cause some companies to be hesitant to adopt integrations and solutions that they may not be familiar with.

However, use cases from leading transportation management services and products show a reduction in operational costs by utilizing collected data on historical routes to identify the most efficient routes and load combinations, minimizing transport expenses and cutting down on empty mileage.

Mandata, a logistics software service provider, offers transportation management solutions that have helped multiple companies reduce operational costs and increase profitability without having to hire new team members.⁵

Visibility and analysis into historical data on past shipments also offers companies the ability to navigate delays and mitigate the risk of future delays. Tracking on-time performance is important, however, without understanding the underlying cause of delays, businesses are at risk of facing avoidable future issues with on-time deliveries. While it is true that delays can be caused by unavoidable issues such as traffic, other issues such as long waits at warehouses and late or missing documentation are also a large component in shipments being late. According to Deloitte, the cost of supply chain disruption is reduced by 50% when companies use data analytics to mitigate risks.⁶



Reduced cost of supply chain disruption

When companies use data analytics to mitigate risks.



An added benefit is that route analysis also helps prevent cargo theft, a major and increasing concern for both shippers and carriers.



For example, CTS International, a global logistics solutions provider, struggled with fragmented systems and inefficiencies, managing transportation tasks across multiple platforms, resulting in significant delays and up to 30 hours of daily administrative tasks. After partnering with CtrlChain, CTS centralized its data, reducing order processing to 30 minutes per day and cutting administrative time by 95-98%.

Reduced order processing to

30 minutes

per day

Cut administrative tasks by

95-98%



CONCLUSION

The transport and logistics industry stands on the edge of a digital revolution, where data-driven solutions offer extremely efficient opportunities for cost reduction. The era of relying solely on manual processes and outdated methods is on its way out, making it clear that the adoption of digital solutions will be imperative in the coming years as the industry continues to change.

The critical role of data in driving operational improvements and efficiencies cannot be overstated - it is not just advantageous but critical for companies to implement comprehensive data analytics processes to allow them to make informed decisions. Case studies of industry leaders like Blue Yonder, and e2open and industry innovators such as CtrlChain demonstrate that digital integrations can transform and streamline operations, reducing costs, and improving customer satisfaction.

Digital logistics management solutions also offer quantifiable savings. Automating routine tasks, optimizing routes, and providing visibility into historical data can significantly reduce operational costs through improvements in efficiencies and risk mitigation. Despite initial hesitance due to investment concerns, evidence suggests that the long-term benefits and savings far outweigh the upfront costs.



Leaders within the transportation and logistics industry should adopt digital solutions for data management. Whether you're a carrier, shipper, or a logistics service provider, leveraging the power of data analytics with emerging technologies in the logistics space can help your business **grow, drive innovation within the industry**, and help move the industry into a space of as of yet **unseen efficiency**.

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