

Digital Solutions

How connectivity can improve your supply chain

As the COVID-19 pandemic struck, supply chain and logistics operations were at the forefront of the response. Throughout the logistics sector, companies are using innovative solutions to overcome difficulties and maintain operations under challenging conditions. The pandemic acted as a catalyst to demonstrate the increased need for supply chain visibility through real-time and risk-relevant data



Modern supply chains strike a balance between a high performance and the lowest possible cost. That has left us with long, extended systems that are often highly complex, low in visibility, and sometimes lacking critical safeguards against disruption. The pandemic relentlessly exposed these systemic flaws. These complex supply chains also deliver an endless torrent of data. The challenge is to integrate and analyse this data.

The role of data integration in creating an efficient supply chain

Every business has its own mix of systems and applications for exchanging files and communicating with its partners. Logistics service providers maintain a tremendous landscape of applications involved in value creation, which need to operate not only within the organisation's borders but also with the IT systems and applications of shippers and carriers.

In the context of supply chain networks, data integration refers to B2B onboarding, which is the process of adding trading partners to the B2B network. Historically, B2B onboarding has been a source of frustration due to its high cost and complexity, but Application Programming Interfaces (APIs) offer a potential solution. EDI-based (Electronic Data Interchange) integration helps to improve the cost, speed and reliability of B2B networks, but is not as useful for business

transformation. Although it is reliable, EDI is an ageing solution that is cumbersome to implement and maintain. APIs, on the other hand, are generally faster to implement and significantly more cost-efficient than EDI solutions. However, they require programming. In addition, APIs make use of standard or RESTful architecture, which results in more flexible and scalable integration solutions based on the standard HTTP protocol.

Digital transformation is driving an increasing need to provide API-led integration across applications and data. Engaging in the API economy is a key part of building a digital business. The ability to access data from anywhere at any time is becoming increasingly important in the age of digitalisation. Therefore, the openness and flexibility of APIs makes them indispensable for B2B integration. However, APIs are not a disruptor to data exchange; they are an extension to traditional forms of B2B integration.

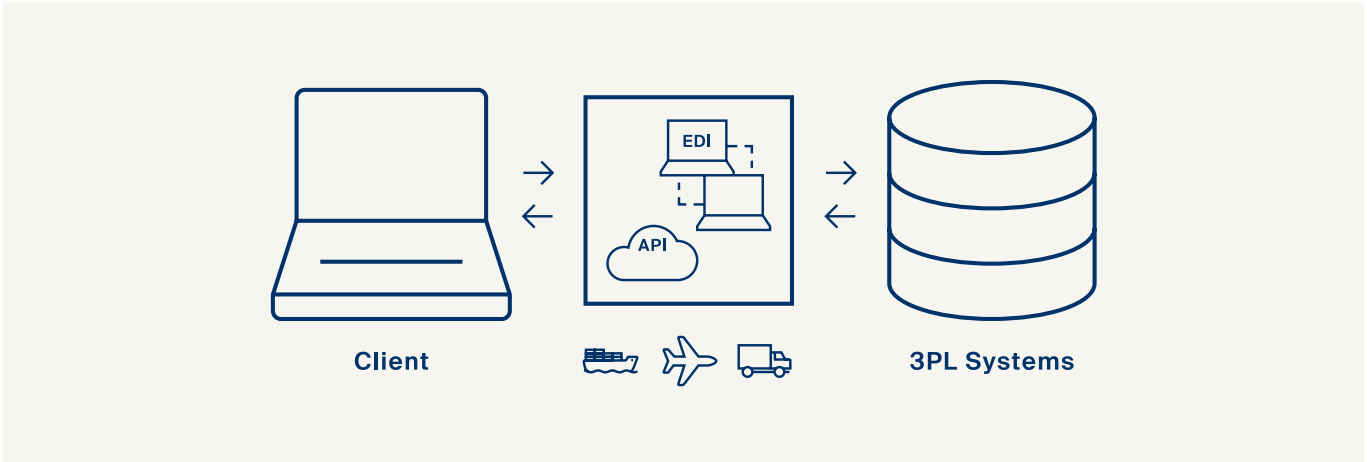
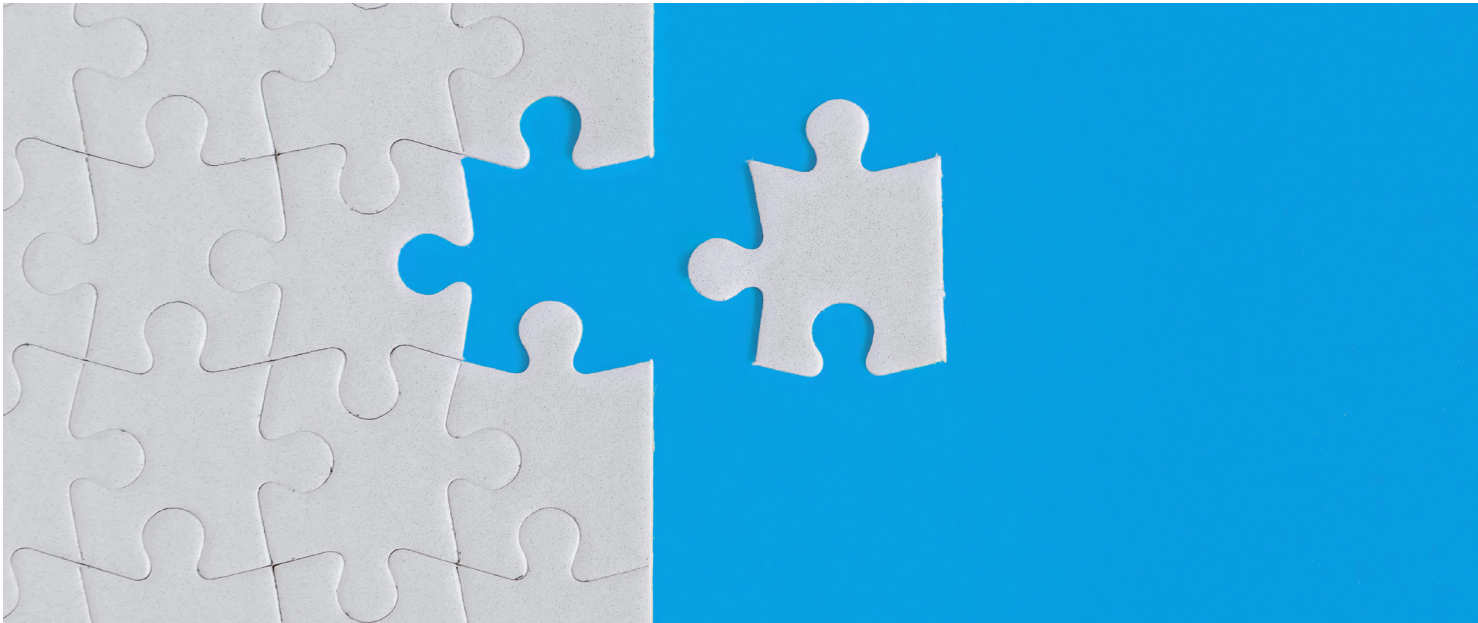


Figure 1: Integration connectivity in logistics



Supply chain management remains a people's business

Nowadays – for good reasons – the focus is on technology that involves automation and visibility in supply chains. However, supply chain management remains a people's business. Customers of traditional freight forwarders value providers with customised solutions, which requires meticulous optimisation of complex processes and deep customer knowledge.

This hypothesis is supported by results from a recent research project regarding data integration in the third-party logistics (3PL) industry. In fact, a global survey (January 2021) conducted in cooperation between Kuehne+Nagel and Fulda University of Applied Sciences (Department of Business), showed the following:

- Large shippers in particular value the ability of their 3PL to respond to their specific needs and requirements
- Shippers place high importance on data integration services and capabilities when it comes to choosing their 3PL
- The surveyed shippers highlighted their need for integration project management and consultation from their 3PL.

These results demonstrate the importance of qualified support during an integration project for shippers. Furthermore, there is now an expectation

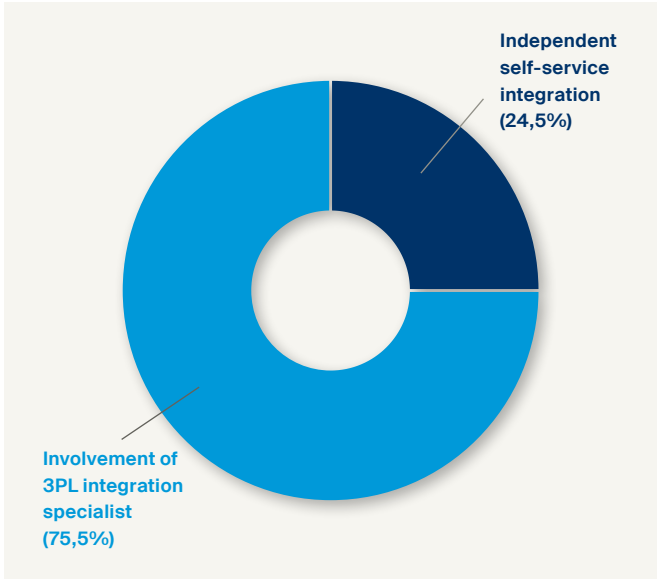


Figure 2: Clients' preference regarding involvement of 3PLs' integration specialists

that logistics service providers possess not only transportation expertise, but also integration expertise as core competencies. This characteristic presents advantages for long-established logistics companies, where solutions are developed based on the progressive use of technology and a thorough understanding of the customers' challenges, needs and goals. This understanding stems from years of experience in the logistics industry, engaging with shippers and understanding their workflows.

How third-party logistics providers support your business through integration

Comprehensive forwarders will act as catalysts for new technologies and increasingly become specialists that offer advanced, data-based solutions. Since competitors in the forwarding space can buy or build an equally good IT infrastructure, the key to differentiation lies in optimising holistically through the effective end-to-end integration of business processes and information. While seamless integration beyond the organisation's borders is not an easy task, companies that can achieve this will have an advantage.

It is, therefore, no surprise that shippers place such high importance on data integration services and capabilities when it comes to choosing their 3PL partner. Customers expect their logistics partners to offer solutions that reduce the workload, improve their processes and allow them to operate more efficiently. The competitive advantage is achieved by optimising the customer's supply chain performance through increased visibility and control over their supply chain. An essential building block for this is the optimisation of how information is exchanged.

Conclusion

Businesses around the world recognise the enormous potential that lies in extending their focus beyond the four walls of their own business. In order to effectively operate multi-enterprise business applications, the biggest challenge remains integration – meaning connectivity, interoperability and data quality – and therewith the collaboration between all the different partners and users of business applications. In a data-driven industry, seamless end-to-end integration of business processes and information can be the key to differentiation. 3PLs have the power to enhance customers' performances by driving value chains through people, expertise and technology.

Making it easier to share information is part of the crucial role that 3PLs play in helping to make supply chains fit for the future and capable of withstanding unique challenges. Companies today need extended and real-time situational awareness of their business environment. Choosing the right

Using EDI and API connectivity, customers can enable visibility in their own systems and improve data accuracy as well as the speed of information flow.

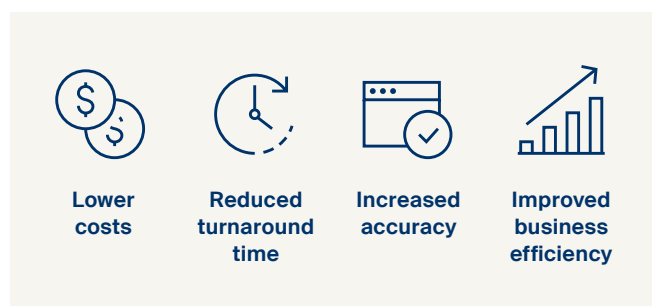


Figure 3: Customer value of data integration

Advanced connectivity solutions, in combination with a 3PL's digital solutions expertise and hands-on practical experience, will maximise customers' value from an ecosystem. In order to fully exploit the opportunities in terms of integration and automation, it is crucial for 3PLs to identify and introduce relevant trends and technologies and – maybe even more importantly – to identify and address hurdles for acceptance of new technologies among customers. This requires highly qualified integration implementation teams on the logistics providers' side to support customers during an integration project.



Figure 4: Phases of digital solution consulting

logistics partner is a good way to achieve this. The better the involved parties manage to make data relevant, the greater the success in terms of reducing overall transportation costs, improving asset utilisation and providing better service will be.