

KS8 (Knowledge Series)

Shipping & Logistics : Digitalization & Innovation – A Primer

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The shipping industry appears to be digitalizing faster than the trade financiers. As businesses demand speed, automation and real-time data exchange, EDI and API have been game changing technologies. Both technologies allow digital communication between several different systems, make booking, tracking, invoicing and documentation faster and reliable. While both serve a similar purpose, they differ in how they work, integrate and the delivery of value.

What is EDI in Shipping & Logistics

- Electronic Data Interchange
- Structured computer to computer method to exchange business documents in standardized formats
- Booking, shipping instructions, container status updates etc exchanged automatically between carrier and customer
- EDI lets two systems “talk” to each other using pre-agreed message formats without manual intervention

Automation, error reduction, large volume data exchange, ERP and TMS system integration are clear benefits

What is API in Shipping & Logistics

- Application Programming Interface
- Flexible way for software systems to interact
- Allow customers to request data or trigger actions in real time eg; ETA for a Container, sailing schedule, place booking directly
- Fast, easy to scale and ideal for corporates
- API connect customer system with carrier’s and pull or push specific data instantly

Difference

	EDI	API
Technology	Older, batch-based	Modern, real-time
Integration	Complex setup, via VANs or point-to-point	Lightweight, often REST-based
Speed	Scheduled transfers	Instant access and responses
Flexibility	Rigid data formats (EDIFACT, ANSI X12)	Flexible, often JSON/XML
Use Case	High volume, stable data exchange	On demand, interactive workflows
Maintenance	Requires significant IT involvement	Easier to update and manage

When used

EDI remains the preferred solution for many enterprise-level shippers, especially when:

- They have a high volume of regular transactions (e.g., bookings, confirmations, invoices)
- Their systems are already EDI-capable
- They need robust, tested processes with established partners
- They operate in regions or industries where EDI is still the standard

Many Carriers offer **bilateral EDI** setups that automate the flow of information for the entire shipping process, streamlining the supply chain efficiently.

APIs are ideal when shippers want quick and easy access to real-time data and need a tad bit more flexibility or a fast integration into modern systems.

APIs are also more convenient when a development team prefers modern tech stacks (e.g., REST, JSON) or when they want to enhance visibility tools, customer portals, or mobile apps.

With an API Developer Portal, a customer can easily browse, test, and integrate APIs for tasks like:

- Tracking containers in real time
- Getting sailing schedules or ETA updates
- Managing shipments with reefer containers
- Accessing PTI information

Can Both Be Used?

Absolutely – a mix of both EDI and API is actually a very common practice. Many companies today use a hybrid model, combining EDI for high-volume, structured transactions and APIs for dynamic, real-time data access.

For example: EDI is used to submit large-scale bookings, invoicing and customs documentations whereas API is used to track individual containers or get live status updates or for visibility dashboards.

This approach allows the Shipper to modernize at their own pace without abandoning tried-and-tested processes

Conclusion

Digital integration isn't just about efficiency. It's about visibility, speed, and better customer service for the carrier. Whether the shipper choose EDI, API, or a mix of both, the industry is building a more connected and responsive supply chain.

The best part? The Shipper don't have to do it alone. Whether one need help setting up EDI flows or want to test an API before rolling it out, Carrier's teams are ready to support the Shipper every step of the way.