

# EDI in Transportation: The Standard that Continues to Automate and Integrate Operations

by Hiten Shah & Anjana S



# Introduction

In the quest to achieve a paperless society, Electronic Data Interchange (EDI) has long been a leading technology. It predates the emergence of Internet and now a chief electronic network connecting just about every business to every other. Earliest used of EDI were internal to companies, used private networks, and enabled a multi-location company to use a common accounting system regardless of location. Also, heavily deployed to track parts of inventories within a business.

## About EDI

Electronic Data Interchange (EDI), is the inter-organizational exchange of business documents in a pre-defined structured format. EDI permits trading partners to generate, receive, and process data with little or no human intervention. With EDI, standard business documents that were previously sent on paper through the mail can be transmitted instantaneously using telecommunication capabilities.

EDI provides a faster, more accurate, and less costly method of communication with customers compared to other methods, such as mail, telephone, and personal delivery. The nature of EDI is to follow a rigid security and data management protocol, while at the same time being flexible, in order to pertain to multiple business models.

EDI is a mixture of three distinct disciplines:

- **Business process** - Domain of the business functional area.
- **Data processing** - Automation of the business process.
- **Data communication** - Using data communications technologies, key exchange of business process takes place.

The marriage of these disciplines allows for the "paperless trading" that comprises EDI technologies. The driving force behind EDI is efficiency made possible by avoiding the handling and rekeying of data on paper.

## Benefits of Implementing EDI

By moving from a paper-based exchange of business document to one that is electronic, businesses have major benefits such as:

- **Automation of operations:** Tasks like - The printing of commercial documents, their handling, classification, inserting into envelopes, franking, sending, registration in ERP, are dramatically reduced.
- **Reduced cost:** Expenses associated with paper are all reduced or eliminated, lowering transaction costs at least upto 35%. You can store and manipulate data electronically without the cost of manual entry.
- **Speed:** Streamlines the business processes and can speed up your business cycles by 61%. Exchange transactions in minutes instead of the days or weeks of wait time. Inventories management is streamlined and made more efficient with real-time data updates.
- **Information Accuracy:** Improves data quality, delivering at least a 30—40% reduction in transactions with errors.
- **Security:** Enhances the security of transactions by securely sharing data across a wide variety of communications protocols and security standards.

### EDI Standards

- **UN/EDIFACT:** Most common standard, implemented by the EU (United Nations / EDI for Administration, Commerce and Transport (UN/EDIFACT))
- **ANSI ASC X12:** US standard
- **VDA:** Implemented standard of the German automotive industry
- **Odette:** Standard of the European automotive
- **RosettaNet:** Consortium of companies mainly from the electronic branch of trade with the aim to create an open E-Business standard for marketplaces etc.
- **BMEcat:** Standard for the interchange of product catalogues, based on XML
- **SWIFT:** Data interchange between cross-border money transactions
- **ELSTER:** German Electronic Income Tax Statement

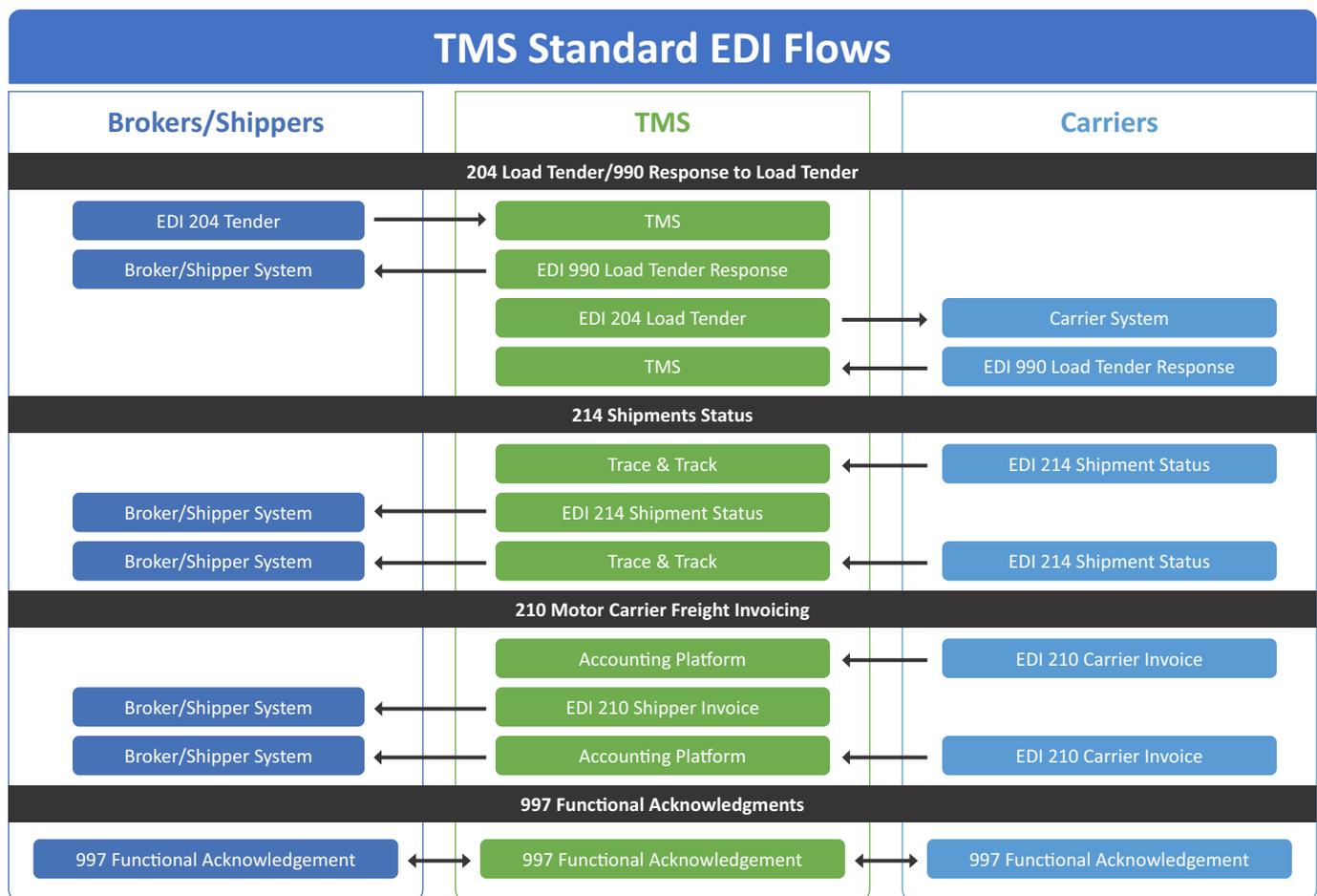
- **Efficiency:** Quick processing of accurate business documents leads to less re-working of orders, fewer stockouts and fewer cancelled orders.
- **Integration of procedures between all trading partners:** The interchange of electronic documents sets up a communication flow with common procedures and working models, clarifying the commercial relation and allowing operations on the basis of known and shared management models.

## EDI Usage in Transportation Management System

As shippers, carriers, and brokers all aim to integrate and exchange information as fast as possible, EDI has been a requirement in Transportation and Industry. Transportation companies who are EDI compliant can communicate seamlessly and electronically with all parties in the supply chain process.

With EDI, routine high volume communications can be automated allowing dispatchers and accounts receivables staff more time to focus on more productive/profitable tasks and provide clients with better customer service. EDI eliminates a dispatcher from having to manually key information into the dispatch operational and billing system, which results in saving time and money while eliminating any costly data entry mistakes.

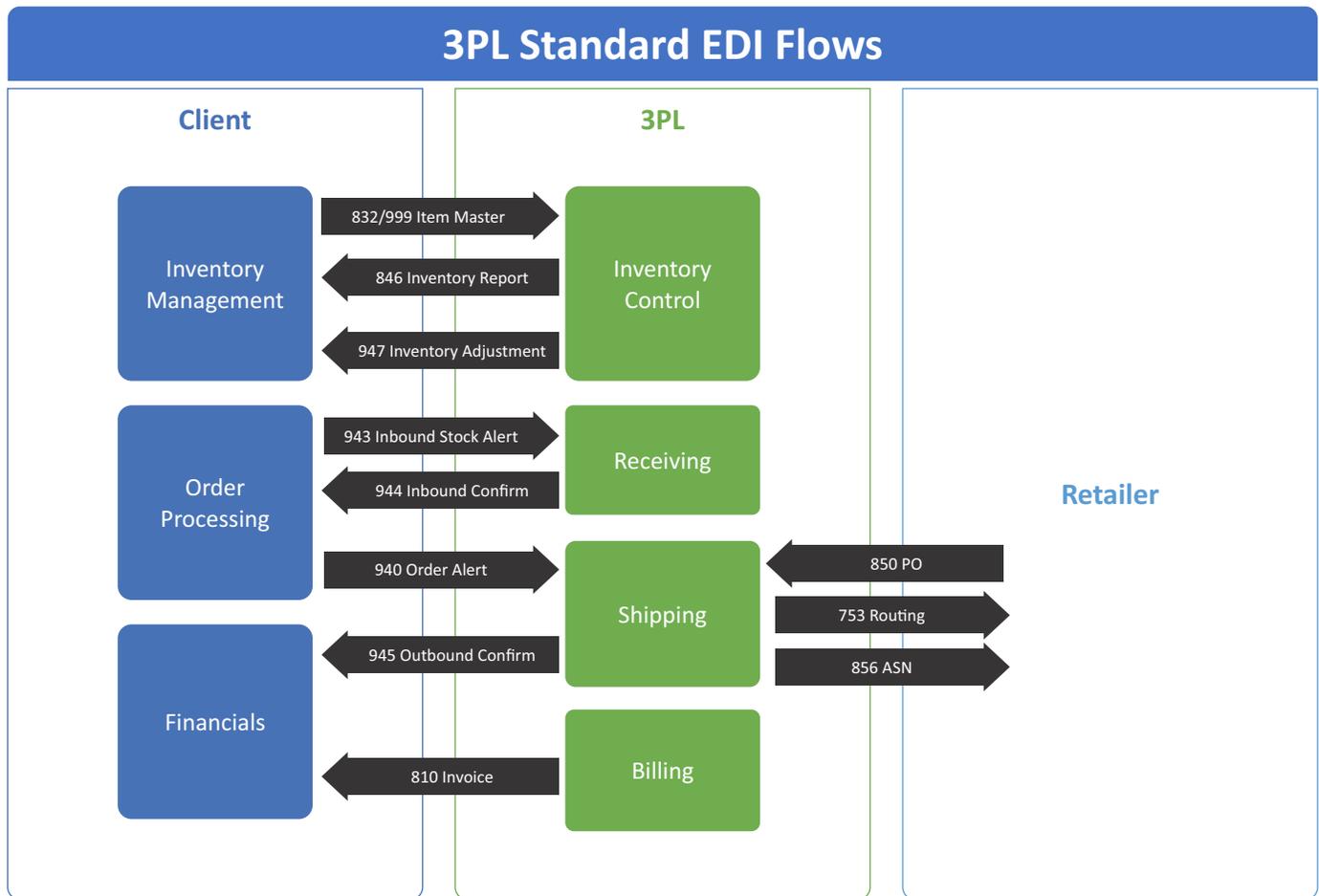
Companies can use EDI to integrate with various transportation management systems or direct carrier systems to tender and re-tender loads, transmit and receive appointment time and status.



# EDI Usage in Third Party Logistics (3PL)

EDI provides direct electronic communication between shipper and 3PL computer systems using national and international telecommunication networks and requires agreements between trading partners. The communication is typically done through a VAN (Value Added Network) using international EDI standards such as the American National Standard Institution (ANSI) or EDI for Administration, Commerce and Transport (EDIFACT).

3PL providers use EDI to send invoices, bills of lading, confirmations of dispatch, shipping details and any other information that linked organizations choose to exchange. It provides highly accurate and timely information about customers' logistics creating business efficiencies by not needing staff to manually collate information.



An overlooked part of running an efficient logistics supply chain is not just the physical movement of product, but how the related data is managed as well. Using this data to your advantage is a smart, quick way to solve many common logistics problems – and EDI is the best mechanism for managing the logistics data in your network.

In our next white paper you will learn more about –  
**Problems of Implementing EDI and how to overcome them.**

# About Trigent

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## Our Headquarters

Trigent Software Inc.  
2 Willow Street, Suite #201  
Southborough, MA 01745  
+1 (877) 387-4436  
sales@trigent.com

## Other Location

Trigent Software Ltd.  
Khanija Bhavan, 1st Floor  
#49, West Wing, Race Course Road  
Bangalore - 560001, India  
+91 (80) 2226-3000

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