

EDI is Coming at You!

You have two chances to avoid Electronic Data Interchange (EDI): slim and none. If you don't believe it, then start listening to some of your customers who are beginning to mandate that you communicate with them through EDI. Globally, corporations have decided to begin to get in shape by adopting this new philosophy of business communications. However, EDI is doing more than just changing the way businesses communicate, it is changing the way they operate. EDI might best be described as an idea whose time keeps on coming. The purpose of this paper is to help you become knowledgeable about EDI so you can begin to understand how this technology can fit into and benefit your overall business strategy.

Background

EDI is only now beginning to get the attention of large segments of the business community and you might expect that it is a fairly recent innovation. This is far from the truth. Believe it not, it was over 25 years ago that EDI had its beginning. It all started when a gentleman by the name of Ed Guilbert was director of traffic for the 1948 Berlin Airlift. It seems he became very frustrated with the tremendous amount of paper used to cope with business transactions. Usually the documents arrived after the goods. In 1966, while working for the Department of Transportation, he established an Office of Facilitation to give the business people a chance to tell the government how productivity could be increased by easing up on bureaucracy. The response was a great success, therefore he helped to found the Transportation Data Coordinating Committee (TDCC) to support the standardization of tariffs for overseas shipments. The mission of TDCC was to convince companies that it was much better to do business via computer than by paper.

In 1975, the TDCC released its first EDI documentation for the Rail Transportation Industry which had been forced to handle tremendous amounts of paperwork. EDI was implemented and proved to be a tremendous advantage.

The transportation industry's success spread to other industries such as grocery, automotive, drug and chemical companies. From that beginning, the EDI concept has grown into what it is today: 10 volumes describing current EDI Standards.

What is EDI?

The concept is simple. Software translates a company's internal documents, such as purchase orders and invoices, into a standard generic format. That format can be transmitted to other companies' computers. In theory, the entire set of transactions can be handled on a computer-to-computer basis with a minimum of manual intervention. Direct computer-to-computer links take advantage of electronic communication's speed and accuracy. Since EDI is not limited by

differences in computer hardware or software, it holds the promise of streamlining daily business routines which will result, proponents claim, in companies saving time and money.

Traditional Documentation Flow

The value of EDI can best be seen by first observing the 'Traditional Documentation Flow' of paper between organizations. The typical transaction between the buyer and supplier requires repeated data entry steps as well as numerous time delays.

The problems with the traditional flow of paper-based business communications can be eliminated by the use of EDI. Some of these problems include:

- *Increased time is* inherent in paper-based systems. One of the main sources of delay is the physical time needed to move the information between the trading partners. Another source of delay is the time required to re-enter the information into each partner's system.
- *Low accuracy* is the result of the multiple times where the data must be re-entered.
- *High labor costs* are caused by the amount of effort required to re-enter the data. In addition to re-entering the data, manual reconciliation must also be accomplished. These are both very labor-intensive activities.
- *Uncertainty* is increased in a traditional system because the sender is unsure the document was received; while at the same time, the receiver was unsure if the document was sent. This uncertainty often results in constant telephoning to confirm receipt of the documents.

EDI Documentation Flow

Once we begin to utilize EDI, you can now see how much more simplistic our document flow becomes and therefore helps reduce or eliminate the problems. As you can see in the EDI flow, EDI dramatically reduces both the time and re-entry effort.

In review, EDI eliminates most of the problems associated with the traditional paper approach:

- *Delays* are eliminated since the transactions are sent via phone lines rather than mail. Information can now be exchanged on a daily or hourly basis.
- *Data* is not being re-entered nearly as much. This reduces the errors associated with re-entry. With EDI you can be certain that what got into their system is the same thing that came out of yours.

- *Labor Costs* are reduced since data does not need to be re-entered. Also, with a growing company, EDI may enable the company to handle more workload without adding staff.
- *Uncertainty* is greatly reduced since the time delays are reduced.

How does EDI differ from FAX and Email?

While both Fax and Email are forms of electronic communication, similar to EDI, neither are EDI. Faxes are images being moved over telephone lines without any structure. Email is used to permit one person to communicate with another person. As with faxes, Email does not have a structure, whereas EDI permits computer-to-computer communication in a structured format.

What are the Components of EDI

While many people look at EDI as a ‘new’ way of doing business, in actuality it is very similar to the paper-based systems. Let’s look at the components we need to do business with a vendor in Italy:

1. Write a purchase order for the product
2. Translate the order into Italian
3. Mail the order to the vendor

Using EDI we would need similar components:

1. Create the purchase order using EDI standards
2. Use the translation EDI software to translate the PO input into a format to transmit to the vendor
3. Transmit the purchase order over an EDI network

What Documents can be sent via EDI?

Generally, any business document can be transmitted electronically using EDI. If the information can be organized to fit into a form, then it can be organized for electronic transmission. Currently, there are over 200 electronic forms. In addition, many industries have developed customized forms to fit their particular industry.

Who Should use EDI?

Everyone in the chain – from the initial supplier to the end-user – benefits from these links. In recent years, we have built the most sophisticated transportation infrastructure in the world, manufactured and delivered products to millions of consumers, and provided goods to help our country achieve world military

superiority. It is your responsibility to provide quality products and services to your customers. That's where EDI comes in.

As your customers realize that it's easier and cheaper to do business with you rather than non-EDI competitors, they will send more orders your way. Of course, lowering the cost of doing business is just one part of the whole picture. Ordering from you means fewer mis-shipments, higher end-product quality, and shorter lead-times. And, as a result of implementing EDI, you'll discover and eliminate supplier redundancy, which translates to even less administration.
EVERYONE WINS!