

EDI: The Implementation Process

A leading expert in the field of EDI has described the process of implementation as “not something where you just turn on the switch”. There are two main areas which must be addressed when beginning the implementation process. One concerns the technical issues while the other involves the cultural issues.

The technical issues may take some time to understand; however they are not complex. Many of the technical issues have already been solved due to the EDI standards, software and networks which are already in place and working. The technical issues need to be understood by those who wish to use EDI; however, these issues do not usually present significant difficulties to most companies.

Cultural issues, on the other hand, are usually much more difficult for companies to deal with. Implementation of EDI changes the way businesses operate and their relationships with other organizations. The complete integration of EDI involves the coordination of purchasing, accounting, systems, and auditing personnel. In addition, since EDI is inter-corporate, the coordination needs to be mirrored in the trading partner’s organization.

EDI Implementation Steps

The successful implementation of EDI involves many steps. While no two implementations of EDI will be the same, the planning and development stages will follow similar steps. The following is meant as a guideline to show the basic steps which must be completed in order to successfully implement an EDI program. They are:

1. Decide on an EDI strategy
2. Obtain Top Management support
3. Establish the Project Team
4. Conduct Educational Programs
5. Perform an EDI audit
6. Develop Preliminary Cost/Benefit Analysis
7. Select your Trading Partners
8. Establish EDI agreement with Partners
9. Map EDI data with Partners
10. Conduct Pilot

11. Leverage EDI investment through Expanded Usage

Decide EDI Strategy

EDI supports the concept of the value chain in which raw materials are transformed into finished goods. Information is associated with the movement of these goods from suppliers to distributors to customers. Therefore, businesses must look downstream to their customers and upstream to their suppliers to identify EDI strategies.

One of the first decisions to be made is just how extensively EDI will be used with the organization. On one extreme, we can implement one transaction type to be used with one trading partner. However, on the other extreme, EDI could be implemented to include multiple transaction types with all trading partners.

In many cases the implementation is an evolutionary process, in which the beginning involves a limited transaction set with only one or two trading partners. Next, the transactions sets are increased as well as the trading partners being dealt with. The final process involves linking EDI with all internal processes and then EDI becomes a normal process within the company.

Obtain Top Management Support

Support from the top is important for any major organizational change. If management needs to be sold, then EDI must be presented as:

- a productivity improvement program, or
- a strategic competitive move, or
- a necessity for survival

All of these approaches must be considered to ensure that management understands the importance of the project.

Establish a Project Team

When deciding the participants of the project team, keep in mind that the project will need the support of a wide base within the organization. Since the implementation of EDI affects so many different organizations within the company, an EDI team with members from each area is necessary to have a successful EDI. Their participation will hopefully result in the feeling of 'ownership' of the EDI idea which will translate into success.

Give careful consideration to the areas of your company affected by this project, and make sure each has the opportunity to contribute to its success. Help them see how the scope of the plan encompasses them, and how important this project is to them.

Set milestones as a group, so all can begin to see the project steps required and how they can help to get to each scheduled date. In many cases the delivery time has been set before the resources have been assigned. So make the best of it — do the very best you can in the time allowed and stay focused.

Conduct Educational Programs

It is absolutely necessary for the organization to have a complete understanding of what EDI is and how it works. Training can easily be obtained through industry action groups as well as seminars.

Take the time to de-mystify EDI which will encourage more people to think of additional ways to use this new capability.

Perform an EDI Audit

Since the basic business activity between partners exchanging paper will be replaced with a electronic transfer, a complete review of current flow as well as the proposed EDI flow must be outlined and understood. Take the time to build a solid audit and control system so you can trust it to inform you of all exceptional conditions.

The control system should tell you when you have data in the network which you have not picked up, when the network says you have data you have no record of, when the network didn't receive something your system thinks it sent, and when you have data on the system which your trading partner has not picked up. A walk through with trading partners should occur before actual changes begin.

Develop a Preliminary Cost/Benefit Analysis

Although many companies are now implementing EDI systems for strategic advantages rather than cost reduction reasons, a cost/benefit analysis is still useful and often necessary to obtain corporate support. For most firms, the analysis should provide economic justification for using EDI. This economic justification, coupled with strategic advantages available through EDI, will prove useful in marketing the EDI effort within the organization.

Select Your Trading Partners

When beginning to trade documents, target your EDI-capable partners first. This will enable them to recover some of their investment, and will help you avoid mistakes you might otherwise make. In addition, use this opportunity to *improve* your business.

Establish EDI Agreement with Partners

Since the use of EDI changes both the format and flow of information, many companies prepare an EDI agreement with each trading partner which outlines issues such as transactions to be sent, use of which network, terms and conditions of electronic transmissions and identification of a project manager at each location.

This agreement should spell out the necessary information to do business electronically with one another; however, do not spend your time making an 80 page document which no one will read. Make the agreement easy to understand. This document is the basis for a win-win situation. Remember, you need your trading partner to be successful as much as he needs you to be successful!

Map EDI Data with Trading Partners

Once the trading partners' relationship is established, the partners must determine which transactions sets will be used, what optional segments are to be used, what type of identifications will be used for products and what communication protocols will be used.

The mapping establishes the ground rules for your EDI effort with each trading partner.

Conduct Pilot Test

Once the EDI system has been designed, trading partners and transactions sets established, a pilot test should be conducted. These tests are normally conducted in three stages: transmission of dummy data, parallel test of electronic and paper transmission, then an electronic transmission with no paper.

The transmission of dummy data is to make sure that all linkages have been set up correctly, the software is working and that messages can be sent and received.

The next stage of the pilot is the actual transmission of data. This transmission should be run in parallel with transmission of paper documentation. This will allow comparison of EDI data with paper data and allow users to become used to the system prior to stopping the paper flow.

The last stage of the pilot test is to use the EDI system with a limited number of transactions without the parallel paper system.

Leverage EDI Investment through Expanded Usage

During this phase there are two main activities. The first is to expand or roll out, to as many trading partners as possible, the program you have just implemented. The second is to look for ways to implement additional EDI applications throughout your organization.

When the company is ready to expand the EDI system beyond the pilot stage, an implementation schedule should be established. Most companies have found that incremental expansion works best. Under the incremental approach, either new trading partners are added to the system or new transactions are added, but both are not added at the same time. In other words, the expansion is done in one of the two following ways:

- Exchange the pilot transactions with additional trading partners.
- Exchange new transactions with the trading partners used in the pilot.

Summary

EDI is to the computer what the computer is to business. When the business community recognizes this, there will be a wholesale implementation of EDI. As you move ahead with your EDI program, your goal should be to take advantage of both the people and the hardware, software and communications capabilities you already put into place in implementing EDI.

Implementing EDI doesn't have to be the painful process it so often turns out to be. By following a plan, your company is sure to become one of those who are gaining many financial and strategic advantages through the use of EDI. Remember, this is a great opportunity to make a great relationship between you and your trading partner even better.

Remember, you learn best by doing. Start with a simple pilot program and build upon those solid blocks.