

The Future of EDI

Where is Electronic Data Interchange (EDI) headed? Up and out and in! EDI is headed 'up' in terms of volume of usage. It is headed 'out' in terms of applications of usage. It is headed 'in' in terms of integration with other management concepts and technologies.

EDI is here to stay. Explosive growth of EDI is now. In this country, EDI is fast becoming a requirement to do business.

Increased Volume

First, current EDI users will be adding more trading partners. According to various studies, current EDI users plan to double their number of trading partners each year for the next three years. In addition, many of the larger companies are still in pilot stages of implementation. Once these companies are satisfied with pilot results, they will likely begin fast and widespread expansion.

A second source of volume will come from new industries entering into the EDI arena. While a number of industries have been involved in EDI for a long while, some are just beginning to take strong action toward EDI. For example, the Petroleum group just established an action group in 1988 which usually indicates a significant increase in EDI activity within the industry.

A third source of growth will occur from the international arena. The US is currently ahead of all other countries in terms of level of EDI use. However, other areas of the world are beginning to catch up. Major EDI efforts are under way in Canada, Europe, the Pacific rim as well as other parts of the world. As companies worldwide continue to compete on a global basis, it is clear that the emergence of EDI standards has and will facilitate the transfer of information and that information will be a major component in controlling international commerce. With EDI, companies are able to cut through cultural, language, and bureaucratic barriers than can inhibit the distribution of products and services. Over the long term, the international market will demand one EDI standard — and it appears that the standard will be EDIFACT.

Application Growth

EDI will expand 'out'. In other words, new and different applications of EDI will begin to be developed. EDI is used as a communication standard in business in a structured format. However, much of what is communicated in business does not fit into this category.

Electronic mail, voice imaging and video text are all methods which are currently being used in business for communication. Now, however, it is becoming clear that the full promise of EDI will not be achieved in isolation, but rather in close

conjunction with these other technologies. It is only through effective combination of these approaches that the business process can be fully transitioned out of manual, paper-based mode and into fully electronic mode, with all the consequent benefits for productivity, time compression, and customer-supplier relationships. Business process re-engineering, in particular, calls for a comprehensive approach to electronic document management.

These communications methods are in the early stages of being integrated into EDI concepts. The combinations of these technologies will provide leverage in several areas for those organizations which can creatively combine the disciplines and address their particular business issues.

Growth Through Integration

As companies become more familiar and more comfortable with EDI and its use, they are finding innovative ways to integrate EDI with their existing systems and with other technologies.

Because of EDI's ability to be easily and profitably integrated with other management techniques and systems, the uses of EDI will grow. EDI is not a stand-alone technology. The long-understood benefits of EDI include reduced paperwork, reduced inventory levels and the potential for Just-In-Time (JIT) implementation. But EDI brings new and challenging questions about what to do with the information once it is received. EDI isn't a means to the end; it is merely the starting point to making your total operation more efficient and effective. EDI, tied in with your management's operating systems, is the next step to creating the total distribution system.

Along with integration of applications with the EDI highway, an organization cannot design its applications as before. Now the applications must be designed in a way to offer access and extraction for EDI. When a systems designer needs to decide the size and valid contents of data elements such as 'product code', the design must take into account the needs of current and future trading partners. In addition, the data storage responsibility of an organization's system expands beyond its own processing needs. It will now include storing and managing data that is required by its partners. But with these new elements come the new processes, controls and reporting requirements. Soon the system designer realizes that at the other end of the EDI pipeline sits the ultimate 'user' of their application system.

EDI's adaptability and its widespread applicability across industries and functions will contribute to its fast and explosive growth.

EDI for Competitive Advantage

It has been said that EDI is a source of 'competitive advantage'. All companies are encouraged to implement EDI in order to gain a strategic advantage over competitors. Yet, it would seem that if everyone has EDI, no one has a competitive advantage. To obtain long term advantages of EDI, EDI must be thought of and used as an evolutionary process.

EDI must be viewed as a process by which strategic partnerships and linkages are formed and through which efficiency of the logistics cycle is improved. The process of EDI permits these relationships and efficiencies to continue beyond the transmission of messages. There is no standing still with EDI.

The Future of EDI

In this paper we have only scratched the surface of the subject of EDI. There is still much that can and should be said about it. EDI is a whole new way of handling our business, trade, and commerce, and not just another way of communicating.

This paper has tried to present the basics of EDI in a manner that can be understood without a technical background. It is the *business* functions of EDI that are the most important, but we depend on technology to make it work. We should never lose sight of this fact as we move into the world of EDI, and begin doing our business through electronics linkages to our trading partners rather than on the paper that has been the way we have done business for so long. The key to all of this is **business need**.