Lake County Contractors Association
Professional Practice Report

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Status and Current Developments of
Electronic Data Interchange (EDI)
by Bill Zeigler, V/H Associates

With the advent of the Internet and popular network services such as America Online, CompuServe and Prodigy, computer user access to information has increased dramatically in the last couple years. Now going further, an increasing number of entities are turning to computer connections to transact business. In a number of instances, these developments are imposed mandatorily. Here we offer several examples of these developments encountered by our members. EDI is commonly defined as the application-to-application transfer of business documents between computers. Many businesses choose EDI as a fast, inexpensive and safe method of sending purchase orders, invoices, shipping notices, and other frequently used business documents. Standards are already proposed, called X12, to reduce conflicts and inconsistencies.

EDI has several advantages if implemented properly. In terms of efficiency, data transfer reduces rekeying information. For instance this article was transmitted for editing rather than retyped. This reduces edit time and error. RJR estimates the cost of a paper purchase order at $70, an EDI counterpart at 93¢. Service is enhanced by speeding access to business documents. Think of the effect fax machines have had on business during the last ten years. Now consider this transfer medium that adds all the capabilities of a live and editable document as well as the ability to see and transmit multimedia and multiple component documents. Electronic forms allow an opportunity to reduce repetition and duplication. Instead of a paper copy in several places, an electronic cross reference can be added that refers to a single digital file. Extending this concept, search and retrieval is enhanced by extending the electronic format of documents.

Perhaps 10 years ago, as one or more PCs became common in the workplace, several private enterprises developed new ways to perform certain transactions. One of our members, Columbia Pipe & Supply started an on-line access system in the early 80's called CODES (Customer Order Direct Entry System). This allowed customers to access inventory quantities and prices, review history, place orders, produce pro forma invoices, schedule deliveries and review open transactions. A cross reference database is also available to identify equivalent items. Bob Eschbach, Segment Sales Manager for the Company says the system was immediately successful and continues in an enhanced version today. The system reduces errors and manual intervention.

Also in the mid 80's, Harris Bank released an access system called the Cash Manager that allowed next day access to cleared check records and bank balances. The customer could also order account transfers, wire transfers and credit line advances. As these connections were limited in access, security was less of a concern than today where encryption techniques are being developed to eliminate access by others. Not long after, PC based personal account managers, such as Intuit's Quicken, opened such control to individuals with an automated disbursement system allowing payment scheduling and an automatic record in the program's check register.

In the private sector, another member's effort, Abbott Laboratories, to move more of its transactions to electronic format is quite dramatic. For certain segments of its contract business, vendors must establish a Lotus Notes connection to their server to bid and complete jobs, report job progress and issue invoices. In the current implementation, they are installing the Notes software and providing training on the system at their own expense and time. This development applies even to smaller contractors or dollar volumes. One of our members does less than $500 per month worth of business with Abbott and fell within the implementation criteria. An extension of on-line methods of transmitting data is user access to funds transfer. In the Abbott system, there are those who are actually receiving EFT (Electronic Funds Transfer) payments.

In a similar vein, the public sector is moving in this direction as well. In 1994, Congress passed the Federal Acquisition Streamlining Act to improve the procurement process. This prompted the Centralized Contractor Registration system and an extensive accounting system conversion process at many government agencies such as the VA Hospital system and Great Lakes. In the next couple years, contractors will need to be registered, configured and operational to bid and perform contracts. The conversion process is affecting smaller jobs first. There have been some delays to date, but this method of interaction is growing and developing with government agencies.

Pursuant to NAFTA of all things, starting July of 1997, many routine and recurring federal tax deposits are required to be made 'electronically' by telephone or modem. In late 1996, the larger liability taxpayers were the first to receive a notification and registration form.

The development of EDI has also changed the way we operate our business internally. User friendly ways of sending electronic messages and attach files to those messages has significantly impacted the way we communicate with customers. Employees use software that allows control of the on-site computer usually to perform work duties when out of the office. A number of companies use this style of connection to perform live data input from a permanent remote office location on the home office system directly and on-line. Internal networks that use phone line connections such as T1, constantly open lines allowing a PC on one network to access the server on another network across the country with the same ease as reading their own hard disk. This enhances the opportunities of cooperative and collaborative software suites. E-mail and group scheduling functions take on a new meaning.

As technology [speed] improves and user experience increases, we can certainly expect ever increasing levels of this form of operation. To enhance research and capitalize on the new and growing capabilities of broad band connections, Education, Industry and Governmental organizations are well on the way to establishing the next generation of world network which includes the Web. This effort is officially designated the Internet II Project. This work will certainly have a direct and almost immediate impact on all Net users as elements of the program are implemented. Pursuant to the goals of the Professional Services Committee, as new developments arise in this area, we will report back on another Update.

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