



Industry Trend Focus: Improving the bottom line through E-Communications

The metals industry has overcome many challenges in the past few decades and in the process has adopted many new technical advances. However, in order to stay healthy in today's competitive environment, metal companies should continually rethink and re-analyze their operating process and procedures. One concept that is easy to administer but is not widely adopted is the utilization of e-communications with trading partners.

Many companies still rely on printing, mailing or faxing documents and notifications that could otherwise be transmitted electronically. The volumes of paper circulating are prone to loss, duplication and misinterpretation, are a data entry nightmare, and tend to be replete with inaccuracies. Further, the cost for storing, retrieving and processing this information indirectly affects the bottom line. As the number of partners in the supply chain continues to grow so will the complexity of the relationships. The need to link these companies electronically will become a necessity.

But what type of e-communications is best for your business? Most people would agree that e-mail is a low cost and effective means to communicate with your partners. However, e-mail servers have become more of a nuisance as inboxes become clogged with "spam" and other inconsequential messages. Auto faxing may reduce some initial clerical expense, but the recipient of the fax receives no such benefit. The concept of Web portals has helped many companies enter the electronic age by delivering direct access to their partners' systems. The disadvantage is that the more people in the supply chain, the more Web portals you are forced to maintain. And all of these alternatives to the paper document still require a manual key entry of information into a client's system. This manual effort reduces productivity and contributes to data errors and delays within the product cycle.

The use of electronic data interchange (EDI) communications can provide the missing link to more effectively enable the supply chain. Formatted data is automatically accepted by your system. Instead of manually inputting and auditing every source document, you manage by exception, allowing transactions that do not meet business rules to fall into an error queue for correction. With this automation, the product cycle can be accelerated and inventory costs reduced. Further, the increasingly international nature of business, including the metals industry, makes EDI a sensible choice. E-mails, faxes and Web portal e-forms by their nature are language dependent. EDI is not.

Nevertheless, there are challenges to implementing this solution. While EDI is more commonplace when dealing with the large automakers or steel producers, few companies have the resources or know-how to even begin this endeavor. EDI comes in many forms (e.g. X12, EDIFACT, XML, flat file), and translating these formats can be very complex. In addition, the myriad of communication methods including automobile network exchange, file transfer

protocol, and value-added networks only complicates the issue and adds to the cost. To avoid devoting an entire department to this single task, outsourcing the EDI services can deliver maximum benefits at minimal cost. These EDI outsourcing providers typically supply complete EDI mapping for all formats, verify that the specifications are up-to-date and handle full trouble assistance to the end customer. All of this can be done without major revisions to your existing database structure or system architecture. Ideally, you should look for a supplier with the right level of experience and an established network that compliments your specific business.

The key to maximizing the benefits of EDI is to link the information to your current business model. If this is cost prohibitive or impractical, there are enterprise resource planning (ERP) software packages specific to the metals industry that incorporate Web-enabled transaction management capabilities with the benefits of EDI. Advance shipping notices, receipt, acknowledgments and production reporting are a few of the most common transactions that can be managed in a Web environment. Technologically advanced ERP software is Internet-based, modular in design and transaction driven so all business transactions may be shared with any internal system or external trading partners. An Internet-based product provides a new dimension to e-communications as XML formats and Web portal data exchanges are advances that make communication capabilities even more viable. Web e-communications can include a database exchange of information by using Relational Database Management System (RDBMS) to RDBMS, XML/SOAP-based Web-Services architecture, or data exchange through an applications programming interface. Web e-communications provide for CAD CAM image transfer as well as text communications. A Web environment may provide a seamless transfer of information between trading partners or even vendor services such as an ERP system transferring information to a logistics system provider to facilitate transportation automation. The Web advantage also provides trading partners an entry to correct errors with EDI transaction delivery. The idea of managing by exception and requiring trading partners to correct their own errors is a breakthrough concept over requiring them to manually input all source document information in a customer's system through a Web e-form.

Until recently, the use of EDI has been limited to larger organizations with dedicated IT staffs and sophisticated communication networks. The widespread adoption of the Internet both domestically and internationally makes EDI a practical technology for companies of any size to implement today. As more industries realize the benefits that computer-to-computer interface offers, the adoption of such e-communication tools will become more commonplace.

Additionally, customers are becoming increasingly demanding regarding the information that they are provided. For example, many customers now require advance ship notices in their EDI format before the material arrives so they have the data in their system ready for material consumption. If you are in close proximity to these customers your system must be very responsive so the transaction is able to "beat the truck." Customers are not likely to key enter information from shipping papers because the EDI transaction was late. Other EDI communications starting to emerge as customer requirements include: inquiries, purchase orders, schedules, pull signals and test results. The sooner you can adapt your processes to these technologies, the more responsive you can be to your customer demands, and the more rapidly you can communicate effectively with your trading partners to eliminate the waste and inaccuracies associated with traditional manual processes. The greatest benefits of EDI include:

1) improved employee productivity; 2) improved control over business transactions allowing for lower inventory levels and faster product cycles, and 3) improved response time to customers.

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