For several decades, business in general including small to medium-size companies (SMEs), have been relying on Electronic Data Interchange (EDI) for order taking, processing and product shipment. EDI, the process by which a standardized electronic format receives and sends information to customers, is designed to be the most accurate and expeditious method for fulfilling customer orders and requirements including shipping. The core concept of EDI is to ensure a cohesive, well-coupled interaction between suppliers, manufacturers and customers.

Yet, despite the technological sophistication of EDI, disconnects still occur, often for reasons having little to do with technology and everything to do with lack of expertise at each level of the supply chain. For example, employees at commerce hubs neglect to complete each required field or, if they complete it, some fields have been filled out inaccurately. As a result, companies are hit with often costly chargebacks. If left unchecked, chargebacks negatively impact budgets and bottom lines.

Knowing the ins and outs of EDI and understanding the ever-changing global marketplace are mandatory, regardless of business size. The giants in retail such as Amazon and Walmart have seamlessly and successfully implemented EDI as the foundation of a cost-effective product shipping process. However, their successes pose a challenge for SMEs that are trying to accommodate those protocols without threatening profit margins.

For most SMEs, outside experienced resources are a necessity if they seek to navigate this minefield of frequently changing protocols safely and profitably.
EDI has been a fact of life in business for decades and its basic format is relatively unchanged. What has changed, however, is the environment of EDI, in particular its protocols. It is here that many of the smaller businesses are feeling the pinch, mostly because they have difficulties complying with two of the most critical elements: interchange and integration.

Little wonder, then, why mistakes here can be so costly. Amazon’s success shows no sign of slowing down, and neither does the popularity of online shopping. Walmart’s very public mission to take Amazon head-on in the online arena puts even greater pressure on SMEs who have no choice but to adhere completely to the individual protocols of their big-box businesses. There are expectations all along the supply chain for products to proceed smoothly and efficiently at each step of the process. For many SMEs, there are still too many budget-threatening bumps and bruises. Why? Because more is involved than proper data inputs. SMEs that want to stay competitive must identify potential obstacles and learn how to overcome them. Their competitive standing depends on it.
Too many SMEs lack a firm grasp on EDI. Research proves it. Just google “EDI” with “chargebacks.” The result will be an endless number of pages graphically explaining surprising numbers of pitfalls. Perhaps the most common one is the assumption that what works for one company’s EDI applies to another’s. Unfortunately, numerous exceptions prove otherwise. Among them:

1. Purchase orders. Improper or missed bar coding will result in a chargeback, especially from the big-box retailers.

2. Faulty invoices. Some may contain an incorrect PO item number or the wrong price. Customers will not tolerate this mistake and demand chargeback payment from the SME.

3. Incorrect label placement. All too often, warehouses attach the shipping label on the wrong place on the container, which prevents the scanning device from reading it. Chargebacks for this inaccuracy are inevitable and expensive if not rectified.

Other issues can be attributed to the long-standing use and occasional misuse of XML (Extensible Markup Language), preferred language for formatting documents in compliance with previous standards. Comprehensive XML compliance is a given for dealing with every customer, especially a major one like Amazon. Users must fully understand and execute transactions demanded by these protocols or face a financial penalty. Not every SME has that knowledge at its fingertips because many, if not most, cannot afford in-house expertise, especially smaller businesses with thin margins.

Another potential pitfall is the variety of order transmission methods from simple emails to HTTP or FTP. The process is complicated enough without adding the propensity of the larger customers, in particular, the big-box variety, to frequently change standards. Failing to meet those standards can range from a five percent chargeback or...worst case scenario...a rejected order. Chargebacks and order rejections are not the times for SMEs to find out about mistakes in EDI protocols that could easily have been prevented with proper expertise.
Most companies that use EDI rely on their own ERP system integration for processing sent and received documents. The myriad of ERP systems increases the likelihood of costly difficulties likely due to a situational problem. Some ERP systems have built-in EDI modules; others do not.

It is important for businesses to ensure that their ERP systems are thoroughly capable of customer EDI compliance. This likelihood of success is achievable only with a fully comprehensive system in place. One large retailer found out how costly this oversight can be; in this case, a $250,000 loss on its books due to a mix of canceled orders and chargebacks. Further investigation showed that many of the chargebacks were due to poorly processed EDI orders. The analysis verified that this company lacked a firm grasp of EDI processes including order invoices and contractual aspects of the sales process required by EDI. Equally surprising was an attitude expressed by some executives who attributed this drain on company finances to a simple problem within the IT department.

Eventually through outside expertise, the problems were corrected, but not before overcoming specific challenges. Perhaps the biggest was the false perception that EDI is as simple as sending an email. It should not surprise anyone that this simplistic view is frequently expressed among some SMEs, who fail to acknowledge the impact on their bottom line until chargebacks come due.
Some SMEs burdened by lack of space rely on 3PLs for their warehousing, distribution and order fulfillment. 3PLs can and have been effective when filling orders, but there are no guarantees. Process success depends on the system the 3PL has in place for compliance with the protocols of the customer that placed the order. An SME that has outsourced to the 3PL assumes that the warehouse has completed due diligence for its EDI to meet customer standards. More than an assumption is required, but often margin-strapped SMEs can ill-afford to keep such expertise internally.

Lacking that resource, the alternative is for SMEs to consider the expertise of a skilled and knowledgeable resource to verify that all standards are complied with prior to outsourcing to 3PLs. Such verification should be considered in the same context as a vital insurance policy.
Four essential guidelines for SMEs (or any business) are vital for avoiding costly chargebacks. These are the heart of successful and profitable EDI transactions. They are:

1. **Thorough knowledge and understanding of EDI standards.** If the company lacks expertise in-house, seek the counsel of an outside resource who offers proven results.

2. **Recognize the contractual obligations.** SMEs (or their retained resources) need to be aware of each customer’s standards. Remember, standards may differ depending on the customer.

3. **Verify steps one and two.** No business wants to be dependent upon a roll of the dice, which would be the case without verification.

4. **Keep an eye on the future.** EDI will continue to evolve and SMEs will have to adjust accordingly.

Technology despite its seemingly endless capacity for problem-solving cannot be relied upon solely as the ultimate EDI problem solver. There are no apps for the incredibly complex issue that is EDI, and none appear likely. Instead, work toward developing a comprehensive commitment to understanding different EDI standards and apply them to every transaction through a combination of technology and external expertise.
Company Credentials

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