

What you need to know when your customers and suppliers say it's time you started using EDI

INTRODUCTION

Your customer's purchase orders - created on their computer - appear in your own financial software without you keying in a sales order.

You receive live confirmation from a supplier that the purchase order you just keyed into your financial software has been received.

No emails. No attachments. No worries. Simple, or is it?

For nearly two decades Electronic Data Interchange (EDI) has been a major driver in delivering greater efficiencies to Australian industry. Unlike many technologies, EDI appears set to enjoy a long life, remaining an important element of the electronic commerce mix for many years to come.

Let's start by looking at the development of EDI, its take up in Australia and in particular, why organisations that are part of the national wholesale distribution and retail supply chain need to consider EDI enablement to remain competitive. We will then examine and perhaps quantify the process improvements that can be achieved by integrating EDI into an organisation's financial system.

A BRIEF HISTORY OF EDI

At its simplest EDI is a way for two computers from different companies to "talk" to each other to share trading information, without relying on traditional paper-based processes. An example is the retailer that conducts much of its business with a supplier via computer. EDI enables the two companies to automatically and electronically exchange information such as purchase orders and invoices.

What is the benefit? Over and above the labour savings, EDI brings accuracy and speed to the exchange of data. More accurate information, less people involved and greater throughput.

A mainframe and minicomputer technology that gradually gained momentum throughout the 1960's and '70's, EDI is exceptional for its longevity. However it wasn't until the 1990's that EDI adoption began to truly accelerate, as both the Internet and PC-based EDI software became widely available.

It was the combination of these two elements that finally made the technology affordable and accessible for small-to-medium enterprises.

Forty years from its inception EDI remains a strong and vital part of Australian trade, particularly within the manufacturing and wholesale distribution industries. Indeed the majority of Australia's major retailers – including Coles, David Jones, Bunnings, Myer, Woolworths and Target - request that trading partners communicate with them via EDI.

HOW TO TALK IN THE SAME LANGUAGE

The developers of the Internet at CERN in Switzerland understood that communication between disparate computers could only work if they spoke to each other in a common language. The adoption of a standard 'language', HTML, made the Internet possible.

Similarly, EDI can only work if the information sent from one computer is understood by its target computer and vice versa. This is where standards come in.

Part of the reason for EDI's success is the maturity of its two governing standards – the United Nations' EDI for Administration, Commerce and Transport (EDIFACT) and the Accredited Standards Committee's X12. Developed over decades, the standards ensure that EDI documents conform to an internationally agreed, structured business message format. Moreover, those making the standards didn't lose sight of the need for EDI to reduce employee time spent on administrative tasks, thus creating a guaranteed benefit for those who adopt the technology.

Another important consideration was that the standards ensure all trading partners could use them, regardless of industry or size or the computer hardware being used.

Over the years standards have continued to be developed so that now the range of trading activities conducted through EDI has broadened to include:

Product identification

Sales inventory and orders

Delivery and receipt of goods

Electronic funds transfer of accounts receivable and payable

Shipping (e.g. tracking of consignments).

Its benefits are primarily felt through the streamlining of processes and faster data transmission. Business processes can be rationalised and data input minimised, removing duplication and the opportunity for human error. Further advantages spawn from timely, reliable trading information. Improvements can be measured in inventory management, transport, distribution, administration and most importantly – service levels or customer satisfaction.

The net effect is to create a competitive commercial advantage through increased efficiencies.

INTEGRATION WITH COMPLEMENTARY TECHNOLOGIES: SCAN PACKING

While EDI creates efficiencies when raising orders and processing accounts, more recently developed scan packing applications help to get stock out of the warehouse faster. Scan packing takes over where EDI leaves off. It oversees the integrity of goods as they are packed and shipped.

As the name implies scan packing involves scanning items as they are picked to meet a given sales order. Scan packing offers a consistent set of procedures which ensures that delivered contents match the requirements of the sales order, circumventing the potential for incorrect goods.

Scan packing provides all parties with a high degree of certainty that the contents are accurate and saves the need to manually check each and every item prior to pack and despatch. It can produce immediate and quantifiable benefits based on reducing the number of goods returns and/or credit notes raised. Customer loyalty and satisfaction aspects are also addressed.

Because of these improvements in delivery accuracy, scan packed shipments reduce administration and improve throughput in the warehouse. This has led many of Australia's major retailers to favour suppliers who use scan packing. In some instances – as with EDI - retailers demand it of their suppliers. In turn, suppliers using scan packing can usually expect faster payment for their goods.

EDI AND THE INTERNET

Even with the development of additional supportive technologies there have been questions raised in recent years regarding the standards that comprise EDI and its future. These have largely been driven by the ever-morphing nature of the Internet and the possibility of it offering a less expensive, more accessible trading alternative to EDI.

Many years into commercial acceptance of the Internet it is apparent that electronic commerce is evolving into a number of different practices. In addition to traditional EDI conducted via a secure network, e-commerce now includes EDI over the Internet, Web-based electronic store fronts or catalogues, and at its simplest, trade conducted by email.

At the same time, EDI is continuing to play its role among larger technology-enabled organisations and their trading partners. For these companies the investment in EDI technology has been extensive and for as long as EDI continues to meet modern trading requirements, they see no reason to change.

Given there are new companies adopting EDI every day, the most likely scenario for the future is that EDI will remain a standard part of the electronic commerce mix, complemented by Internet offerings for those organisations unable to undertake a full EDI implementation.

REALISING THE BENEFIT OF EDI

By far the largest users of EDI in Australia come from the wholesale distribution and retail supply chain. This stems in part from the fact that almost all major retailers' in this country request that

suppliers adopt EDI. Without EDI a manufacturer or wholesaler can damage important customer relationships and risks losing orders.

It is also helped by the fact that EDI comes into its own in situations where there are very large orders for multiple items involving multiple product codes. The more complex the order, the more transparent the efficiencies of EDI become. It is not uncommon to see EDI users who have several thousand line items on a single purchase order. This environment is a perfect match with wholesale distribution.

Yet even within a market sector that has embraced EDI, the technology remains separate from much of the core business. Most low-end and inexpensive EDI solutions today do not integrate into a company's financial system, resulting in EDI being treated as an isolated business process.

For many Australian businesses, data that is already being captured by the EDI system is later manually re-keyed into their financial software system. The very benefits of using EDI are lost : re-keying is labour intensive, inefficient, and opens the door to greater risk of data entry error.

In times past the lack of integration between EDI and financial software could be attributed to cost of ownership and complexity. This is simply longer the case. Software systems are available in market today that can both import and export data with the click of a mouse. Some of the more sophisticated software packages have taken that concept to the next step by removing the need of user intervention. These systems are often based around MS SQL databases, which in turn have the advantage of being both robust (from the view of automatic transaction roll-back) and scalable as transaction volumes grow.

For a wholesale or retail organisation, a competitive advantage is more than just supplying the right product to the right person. It is about consistently being able to meet a customer's expectations, giving better prices by driving profitability, reducing operating costs and not compromising on accuracy.

One final thought: The adoption of EDI has a direct correlation to the level of working capital required to sustain and grow turnover. Getting the order right the first time speaks directly to the level of 'buffer' inventory required in the warehouse or store. Specifically, the amount of working capital tied up at any one time in inventory can potentially be reduced if the order to cash and purchase to payment cycles can be streamlined.

The continually developing market for EDI has resulted in the release of a variety of integration options that have brought the benefits of unified systems within the reach and capabilities of both small and large organisations.

CONCLUSION

EDI is one of the earliest forms of e-commerce and its longevity is testament to the breadth and maturity of its standards. It retains a pre-eminent role in Australian business and this is particularly noticeable among manufacturers and the wholesale distribution industries.

The primary benefits of EDI extend well beyond the establishment of new trading relationships to include reductions in re-keying, paper handling and associated consumable costs; faster order fulfilment and stock turnaround times; and efficiencies that offer a range of cost-savings opportunities.

Yet many small-to-medium enterprises are failing to reap the full benefit of their EDI implementation by not taking full advantage of the business management possibilities that it can offer. Having established EDI capabilities to conduct business with particular partners, they fail to integrate the data with the very backbone of their organisation – their financial systems.

The lesson for the wholesale distribution industry is clear. If retail partners are demanding EDI trading, don't consider the technology in isolation from the rest of your business. Integrated with your core financial system, EDI can open the door to improved e-commerce, process efficiencies and a wide range of proactive financial management advantages.

WHITE PAPER FEEDBACK AND QUESTIONS

Any feedback or questions, generated by this white paper, would be much appreciated.

Contact the Author, David Simmonds, at:

Email: davids@jiwa.com.au

Web: www.jiwa.com.au

Phone: +61 2 9409 0700

JIWA Financials – for MS SQL Server

ABOUT JIWA

Established in 1995, JIWA Financials is an Australian software developer of one of Australia's most respected business financial solutions, JIWA Financials. Designed for the Australian environment, JIWA Financials is a Microsoft Windows-based financial solution servicing a client base that ranges from single user sites up to global enterprises. The software places emphasis on data integrity and software performance regardless of transaction or user numbers. The focus is on accurate stock costing and tracking, and efficient general ledger and cashbook functions; JIWA Financials has found a natural niche among importers, distributors, manufacturers and service repairers.