



Invoices Creeping Through the Backdoors

Introduction

Most companies run a pretty tight ship. A typical manufacturing company may have streamlined its staffing costs, reduced the administration overhead, installed, set up manufacturing partners in China and perhaps started selling products and services over the web. They've worked hard to maintain their competitiveness and are proud of their achievements... and so they should be.

But, walk into any company, large or small, and you'll still find an accounts team processing paper invoices. Ok, some of the large organisations have invested heavily in e-Business initiatives, document management software, electronic trading portals or perhaps EDI (Electronic Data Interchange); but when you dig a little deeper there are still paper invoices creeping in through the backdoor. It's often the small suppliers and customers who create the problem. They can't and won't invest thousands of pounds in new technology and business procedures. They don't have the volume, the cash or the inclination to make it work. We all accept that processing a paper invoice is crazy in this day and age, but how do you create a strategy to deal with the real world.

The Small Guy

So here's the problem: we need an e-Business solution which will cope with our largest suppliers but we also need an e-Business solution which will cope with the "Small Guy", a company with 5 employees running Sage Line 50.

What's out there?

Before we can consider a way forward, we need to consider what invoicing methods are already out there. So let's consider the pros and cons of each. The table below isn't designed to be a definitive guide, more a way of considering each option and the suitability to the "Small Guy".

Post Paper Invoices

Cost to Send: High - at least £0.5 per invoice.

Cost to Process: High - Everyone quotes different figures but £10 to £20 to process an invoice isn't far off the mark.

Pros/Cons: Anyone can raise a paper invoice. Simple setup with little technology required. Environmentally unfriendly - paper cost, printing cost and postage. Processing costs are high and automation is difficult.

EDI

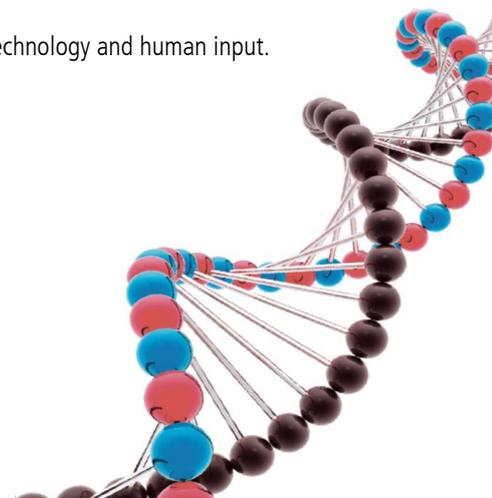
Cost to Send: Low - but there can be a transaction charge.

Cost to Process: Low - >£1 per invoice

Pros/Cons: Automated. The use of an agreed standard. Some setup cost both in terms of technology and human input. On-going charges.

Email or FTP of XML files

Cost to Send: Low - no transaction charge (email is free).





Cost to Process: Low - >£1 per invoice.

Pros/Cons: Simple to automate and no transaction charge. High setup cost both in terms of technology and human input. What XML schema do you use? You may have to support multiple schemas.

Email or FTP of CSV, ASCII text or other structured data formats

Cost to Send: Low- no transaction charge (email is free).

Cost to Process: Low - >£1 per invoice.

Pros/Cons: Simple to automate and no transaction charge. Low technology cost for sender, but receiver carries the cost of processing. Less reliable than XML.

Web Portal

Cost to Send: Low.

Cost to Process: Low - >£1 per invoice

Pros/Cons: Once setup, the process can be automated and large volumes processed automatically. Can be custom written, which incurs a high setup and maintenance charge.

Data Translation Bureau

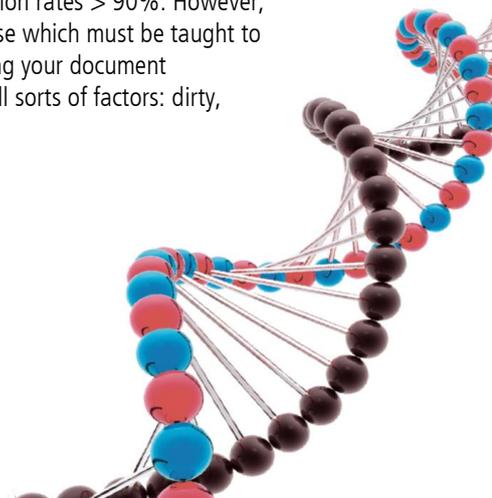
Cost to Send: Low

Cost to Process: Low - >£1 per invoice

Pros/Cons: Simple to setup - somebody else does the work! There is normally a setup charge and often a small transaction charge.

Living with Paper

One approach is to accept things as they are and to accommodate paper invoices. In other words, capture the information off the paper and make it available to your AP system (Accounts Payable system). Over recent years, lots of time and effort has been spent on improving document management software and the technology behind scanning and recognition software. The aim of this software is to reliably convert a paper document into electronic text. This type of system combines OCR (Optical Character Recognition) technology and contextual logic which looks for key words within the document and associates them with title data on the document. For example, when you find the word "Date", the data nearest to it is normally a date field. With this knowledge, you can surmise the likely formats and possible values for the field you've just captured and can automatically discount some possible OCR results (e.g. a month value will never be above 12). By combining technologies such as artificial intelligence, multiple OCR engines, and contextual/fuzzy logic, these systems give improved results over the use of fixed OCR templates - some vendors claim character recognition rates > 90%. However, they are costly to purchase and often complex to setup and refine. Many use a knowledge base which must be taught to recognise the type of invoices you receive. No matter how much effort you spend implementing your document management software, no system is 100% accurate and errors will always creep in through all sorts of factors: dirty, crumpled or torn paper, changes to invoice layouts or even scanner faults.





Law of Diminishing OCR Returns

As no document management software system will give you 100% recognition rates, do you double check all of your results or do you accept the odd one will slip through the net. Unfortunately, it's the odd one slipping through the net which costs money to track down. It makes sense to aim for as high a recognition rate as possible, but this type of approach has a major drawback, it follows a law of diminishing OCR returns. The more time and money you spend trying to improve OCR performance, the smaller the increase in recognition.

If your document management software is achieving an 80% recognition rate, you may have to spend £5,000 to achieve a 5% improvement. Once you get to 90%, that same 5% may cost you £50,000.

Paper = Cost

When you look at the costs of creating and processing a paper invoice, one thing jumps off the page at you - COST. Do you spend time and money trying to read paper, or do you invest your time into grabbing it electronically, and processing it through your backend systems with document management software.

On so many levels, environmental, speed, cost and reliability, electronic trading is the way to go.

Electronic Trading - Don't Bully the "Small Guy"?

OK, if you accept some sort of electronic trading makes sense, how do we connect with the "Small Guy" who has no investment in document management software? What's needed is a fresh approach, one which complements the existing infrastructure, but gives us more flexibility. Focusing again on the "Small Guy", 9 times out of 10, he'll use a computer system to create an invoice. So why does he covert his computer data into paper, only for the receiver to convert the paper invoice back into an electronic file, or at least re-key it into an AP system, at the other end?

Stipulating, demanding or even forcing an EDI / customised e-Commerce solution on the small supplier won't go down well. Why should the "The Small Guy" go through the pain and expensive of implementing EDI, when his customer gets all the benefit. The only time this tack works is if you're a very important customer, with a lot of power!

Is there a simple answer everyone's missed so far? No, not that we're aware of! What's needed is a variety of low cost, e-commerce options.

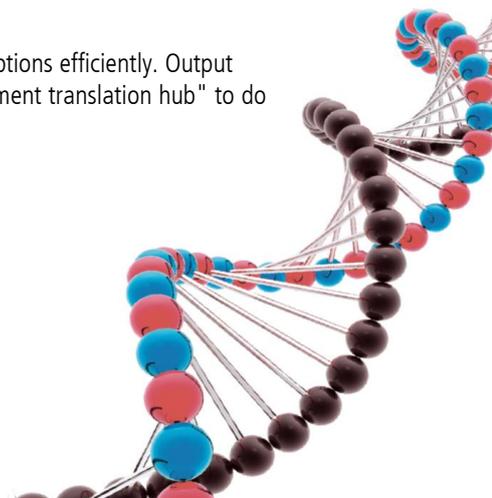
Sensible Options

A responsible partner must offer a number of electronic trading options and a good starting point is to ask what your supplier can deliver. Have they already invested in document management software and if so, what is it capable of?

- Can your supplier send any of the following formats, XML, CSV, EDI format or ASCII text?
- Can you send an Adobe PDF image of your invoice?
- If the answer to the above is no, then it may be worth considering a simple alternative. A simple, low cost "print capture client" is available, which will take printer data and convert it into an electronic format (e.g. ASCII text) which can then be automatically emailed.
- For suppliers without a computer system, provide them with a spreadsheet to fill in, which can be emailed back or perhaps a web portal/HTML form which can capture invoice data.

Thinking Fresh

If you are going to offer a variety of invoicing methods, you need the tools to process these options efficiently. Output management software (e.g. Formate software <http://www.formate.uk.com>) is an ideal "document translation hub" to do this.





When used for simple e-Commerce, output management software (OMS) performs 3 major functions, these being:

1. Import - OMS will collect virtually any type of data be it CSV, ASCII Text, XML, EDI files, data in Emails, data from web pages or even MS XLS spreadsheets.
2. Recognise and Validate - OMS will read the data and check what has been received prior to any further action. Errors will be picked up and resolved through a workflow process.
3. Translation - OMS will translate the invoice and make it available for virtually any back-end business system (from SAP to Sage). It will also create human readable copies for a long term archive, which can automatically be submitted to a document management software archive - UK invoices should be kept for 7 years for VAT/TAX legislation.

Some suppliers can only email an image of the invoice in PDF format. In this instance, most OMS systems can extract the PDF attachment from an email and submit it to a document recognition system. It can then be passed through an approval process before archiving into a document management software archive

<http://www.document-management-software.co.uk>. For those suppliers who can only print a paper invoice, there is even a low cost capture client which will take printer data and email it back to the OMS Server for processing.

For companies who already use EDI software, OMS can be used to create human readable copies of EDI transactions (typically in PDF format) and store them into a document management system. Where errors occur in an EDI process, OMS is an ideal way of picking up the error and starting a workflow procedure to resolve the problem.

Contact Document Genetics

Document Genetics is an established UK based company providing a comprehensive range of business automation software. We focus on improving document automation, workflow and collaboration within our client organisations, and our range of innovative solutions and specialist services help to save time and money by processing documents and data more efficiently. If you'd like to discuss your supplier invoice application with Document Genetics, we'll be delighted to help.

Author - © Joe Hyde, Sales & Marketing Director at Document Genetics

Hall Farm, Sywell Aerodrome, Sywell, Northampton NN6 0BN

t: 01604 671177 f: 0844 557 6431

e: info@document-genetics.co.uk w: www.document-genetics.co.uk

