Delivering electronic invoicing for accounts payable and receivable
Management summary

Since 1997, the internet revolution has laid the foundations for a better business environment. Many processes are now electronic, which removes costly and inefficient paper processes and creates a powerful source of business intelligence.

Yet the accounts departments of many businesses are still working with old-fashioned paper-based processes. Paper invoices are generated, delivered, copied and archived which is exhausting and time-consuming.

However, until recently, there appeared to be no reliable, trusted alternative.

This white paper describes how the technological barriers that hindered the introduction of electronic invoicing have been removed. You can now look forward to reduced costs, improved financial management and easier compliance with legal and regulatory requirements.

Internal systems

Recognising the frustrations of accounts departments, many technology vendors have attempted to deliver solutions to the problem of paper-based invoicing. From Electronic Data Interchange (EDI) to Enterprise Resource Planning (ERP) systems, they have tried to remove costly manual processes from the accounts department and mostly failed.
The failure of EDI

EDI was a fantastic concept, which promised real optimisation of the supply chain. It was based on secure private networks, rather than the internet (at the time, the internet was not the ubiquitous solution it is today).

However despite initial optimism, it singularly failed to deliver an integrated solution.

The main problem was the complexity of underlying protocols. This meant the system requirements proved impossible for companies, other than the largest or technically advanced, to implement.

Subsequently, EDI was problematic to integrate into the payments arena, with different private networks and obscure protocols.

Advent of ERP

Modern ERP solutions have transformed business processes, allowing much greater visibility over key aspects (depending on the implementation) of a business than was possible before.

These modern systems also have the ability to automate much of account department work, but again have mostly struggled to maximise their benefits in this area.

This is mainly due to the proprietary nature of the accounts solution. It integrates neatly into another customer or supplier using the same ERP solution, but struggles with different vendors’ products.

More problematically, complex ERP interfaces make it difficult for smaller suppliers to link directly.
Restriction of the supplier base

So, while EDI and ERP have managed to improve internal processes, they have also presented challenges. Either the interface is through paper, or you are restricted to suppliers who can work with your chosen software solution.

Neither of these solutions is ideal; you either increase your internal costs through a heavily manual process or restrict your supplier base on an arbitrary basis.

Interoperability – the missing piece from the jigsaw

Interoperability is the seamless ability to deal with any supplier, customer or partner without regard to what systems they have or where they are across the globe.

At the moment, interoperability is based on paper. It can be shipped worldwide (although not necessarily quickly or cost-efficiently) and can interface to any other system. However it does require large numbers of operators.

True electronic interoperability requires two key features that have not been available to date:

- **Translation** – allowing a company’s systems to communicate with any other company.
- **Trust** – allowing a company to trust correspondence from any other company.

*Translation – delivering understanding*

With a myriad of different accounting systems in use across the world, incompatibility is rife. In the absence of every company speaking the same data language, translation is needed to ensure your partners can understand what you are saying – and so you can understand them.

The costs to your company of implementing data or system level translation at your end of the process can be onerous. You might end up subsidising others who know if they don’t change, somebody else will pay for the cost of integrating to their format. Without a common language to translate into, universal translation is both complex and expensive.
Trust – a key ingredient

One missing component with the internet revolution has been trust. Companies across the globe can communicate with one another, but most don’t rely on what they receive.

This is especially important in the accounts arena. While an invoice may be a transaction between you and another company, there are hidden partners who also have an interest in this transaction. Specifically (although not limited to) the various tax authorities in your locale.

When the record is paper this isn’t a massive issue, since there is a physical record to prove the transaction. Paper also provides a measure of protection against fraudulent changes to the document since an original, unchanged version exists. In the electronic world, it doesn’t exist.

To ensure their ongoing integrity, electronic documents need to be digitally signed using identity credentials issued from a Trusted Third Party (TTP). These digital signatures ensure authenticity, limit access to authorised parties, and prevent unauthorised tampering or change. The EU has formalised this, so that companies within its trading area (under EU Invoicing Directive 2001/115/EC) issuing electronic invoices must digitally sign them.

Additionally, these signing certificates must be issued by Trusted Third Parties in accordance with the EU Digital Signature Directive 1999/93/EC.
The optimised solution

EDI and ERP have failed to deliver a seamless solution to businesses. So what are the key features that a generic service needs to support?

For starters, it must be:

• **Agnostic** – it should offer full interoperability between all types of accounting, ERP and back office systems.

• **Compatible** – able to work with emerging data standards and regulatory directives – such as ISO 20022.

• **All encompassing** – capable of supporting every aspect of the payables and receivables process. It must provide each member of the trading network with an automated end-to-end solution.

• **Online** – it must offer a common platform which allows you to view, authorise, pay and manage all documents in the financial supply chain including quotes, purchase orders, invoices, remittance, credit notes and statements.

• **Visible** – it must offer detailed reporting to ensure a clear view of the process is shown at all times.

• **Secure** – it must ensure integrity throughout the process, only allowing authorised users to perform actions and securely recording the authorisation chain with digital signatures.

• **Scalable** – it must be capable of integrating with the infrastructure of each member of the supply chain. From the largest multi-national to the sole trader operating from a single PC.

The following diagram shows the architecture for a utopian solution.
**Components of a digital document**
For a solution to be used across the board, there are three key features that the digital documents must have.

Documents must be:

- **User-friendly** – for backwards compatibility, the documents must be capable of being read by a human without requiring costly software to be installed.
- **Machine readable** – to facilitate straight through processing and full data capture, the documents must be electronically structured to allow systems to process them automatically and without manual intervention.
- **Digitally signed** – for legal, regulatory and security reasons, the document must be digitally signed using a credential from a TTP. This ensures the identity of the authoriser, and the information in the document, can be trusted.

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**Supporting the supply chain**

Any optimised solution should allow small-medium sized companies to play in the same space as large businesses. Smaller companies are often the life-blood of a supply chain; they need to be able to integrate with their systems (usually a single software package) just as easily as multi-national organisations with their complex IT infrastructures.

Leaving the smaller companies out of the mix means the full range of benefits for larger companies cannot be realised.
Any solution must provide a way for smaller companies to generate electronic invoices. Also, it must be:

- **Simple to implement** – it must not alter existing systems within that organisation, regardless of the software being used to manage their supply chain.

- **Deployed at low cost** – expensive investment in software licences, training time or implementation skills is not viable for small businesses. A solution is needed that can be deployed in minutes and learnt immediately.

- **Capable of linking to all customers** – it must be capable of linking to all components in the supply chain. It is never going to be viable for different solutions to be deployed within the same small business.

- **VAT compliant** – it must ensure the same level of compliance with the tax authorities that larger players have. A solution that still requires paper records has not solved the overall efficiency problem.
The proposed benefits of electronic invoicing

The impact of electronic invoicing is felt immediately in the reduced costs of financial supply chain management. By making the transition from paper to electronic, you could more than halve your monthly invoicing costs.

A benchmark study by the Aberdeen Group revealed cost reductions of 50-60 per cent per invoice. McKinsey estimates that about $1.90 for every $100 of invoices is spent on administrative tasks.

Attractive though it is, the money saved with electronic invoicing is not the principal driver for many organisations. There are also sufficient quality benefits. Benefits such as a reduction in the number of errors you would normally experience with manual data input and being able to gain immediate access to mission-critical information – information that would otherwise be hidden away in folders and filing cabinets.

This powerful source of data intelligence means you can better manage the purchasing and supplier relationships your business has.

Having this information freely available enables you to:
• quickly assess the number of outstanding invoices and total revenue owed
• project how much revenue can be accelerated in the time given
• design a personalised trade discount for each open invoice based on past payment behaviour, customer profiles and internal margins
• immediately notify only your appropriate customers about a new discount and append terms directly to the invoice
• measure and adjust cash forecast in real time.

Because every aspect of the financial supply chain is electronic, it is automatically archived with powerful search options allowing you to find a document in seconds. Less time is spent searching through filing cabinets or chasing copy invoices.

However, longer-term benefit is perhaps more compelling in the light of recent corporate history.

Recent legislation designed to prevent the repeat of the Enron/Worldcom scandals has put financial transparency at the top of the agenda. Initiatives such as Sarbanes Oxley and the EU Invoicing Directive are forcing companies to improve the visibility of financial information and the way in which it is managed.

Electronic invoicing not only offers you direct benefits, but also facilitates compliance.

The electronic future

This paper has outlined how Electronic Invoice Presentment and Payment (EIPP) has changed the way financial supply chains work.

Information flows directly, quickly and securely from system to system. By eliminating the need for manual intervention there are fewer errors, management is better, cash flow improves and costs are reduced.

What existed ten years ago in theory now works in practice. A stable, proven business-strength solution that helps you save money and improve quality – day-in, day-out.
About The Royal Bank of Scotland

TrustAssured is a product of the RBS group and issues digital identity credentials that can be used to provide certainty in electronic transactions across the globe.

The RBS group already provides trust solutions throughout the world. As sponsor for nearly 40 per cent of the direct BACS submitters onto the UK internet-based payments infrastructure, we have developed a comprehensive understanding of the issues involved in ensuring the integrity of this process, whilst driving cost reductions across the industry.

The RBS Global Banking & Markets (GBM) division is the market leader in large corporate banking in the UK, having relationships with over 95 per cent of the FTSE 100.

Equally, as one of the largest small-business banks in the UK, RBS is uniquely placed to understand the needs of all organisations.

This means we can deploy a secure solution that presents seamless connections in an overall supply chain.

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