UK National e-Invoicing Forum

E-Invoicing

MAKING IT HAPPEN

The Business Case for e-Invoice adoption in the Public Sector

Written by

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on behalf of the

UK National e-Invoicing Forum

Local Government Association

Department for Business Innovation & Skills

Crown Commercial Service

Local Government Association

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1. EXECUTIVE SUMMARY

ELECTRONIC INVOICING (E-INVOICING) OF B2G TRANSACTIONS COULD SAVE THE PUBLIC SECTOR AND ITS SUPPLIERS A MINIMUM OF £2 BILLION PER ANNUM

We would like to introduce a complimentary report to 'Making It Happen' written by the UKNeF: The adoption of e-Invoicing in public procurement: Guidance for EU public administrations. This document was prepared by an Activity Group of the European Multi-Stakeholder Forum on e-Invoicing (EMSFEI) focused on the adoption of e-Invoicing in public procurement and endorsed by the EMSFEI on 21 March 2016. It describes the key decisions, phases and critical elements of an e-Invoicing programme, including a step-by-step guide on how to implement it.

According to the UK Government, electronic invoicing (e-Invoicing) of B2G transactions could save the public sector and its suppliers a minimum of £2 billion per annum. Not only that, it can drive efficiency, increase visibility into cash position, reduce fraud, open up new revenue opportunities, encourage prompt payment, and help boost growth among small and medium businesses by releasing cash into the wider economy.

So with all these compelling benefits on offer, why is e-Invoicing adoption in the UK still stalling, while currently flourishing – and even becoming mandatory – in forward-thinking nations such as Mexico, Chile and Brazil? Even the rest of Europe is in good shape to meet full member adoption by 2018.

Recent research by iGov reveals that education and awareness are required. Many UK public sector organisations are unaware of the current costs of manual invoice processing, much less the benefits of e-Invoicing in terms of productivity and hard cost savings. Others are daunted by the potential disruption of the system, business process and cultural changes needed to make true e-Invoicing a reality, or unsure how to reuse existing investments or resource a transformation project.

With almost half of UK public sector organisations citing an interest in e-Invoicing, this report goes some way towards addressing the appetite for information and pragmatic guidance.

Drawing on the findings of the iGov study, the report initially explores the disadvantages of the status quo – manual processes based on paper invoices and unstructured PDFs transmitted via email – including the cost, effort, fraud risk and errors associated with high levels of human interaction.

It then illustrates the direct savings to buyers and suppliers offered by e-Invoicing throughout the processing lifecycle, and a step-by-step approach to how and where efficiencies can be achieved. It goes on to outline the opportunities opened up by e-Invoicing for the use of innovative financial instruments such as reverse factoring, P-cards, dynamic discounting and supplier invoice financing.

The report addresses the most commonly-heard objections and barriers to e-Invoicing adoption, from a shift in organisational mindset to resourcing and supplier adoption. It offers a clear maturity model against which organisations can benchmark their current invoice processes and determine the delta of change required to achieve improvement or excellence, together with an in-depth analysis of the level of savings they can expect to achieve as a result. There is also practical guidance on building the business case for e-Invoicing adoption.

Offering a clear roadmap to the ultimate destination of touchless processing, this report is an authoritative guide for Finance and P2P leaders in UK public sector organisations looking to make e-Invoicing happen.

2. PURPOSE OF THIS REPORT

THIS REPORT OFFERS GUIDANCE TO LOCAL GOVERNMENT ORGANISATIONS ON HOW TO MAKE THE MOVE TO E-INVOICING

This report follows on from the "2014 Parliamentary Enquiry – Electronic Invoicing, the next steps towards digital government". To quote this report:

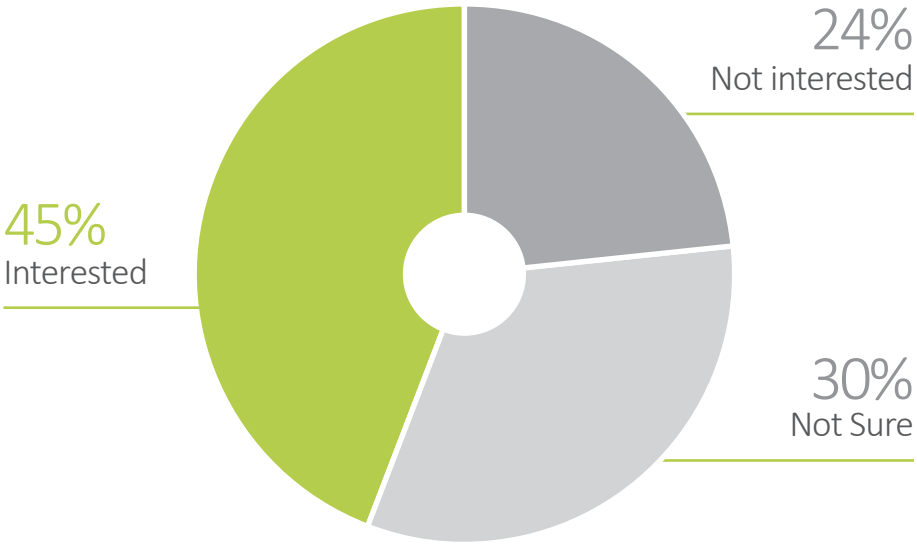
"Electronic invoicing could save the public sector and its suppliers a minimum of £2 billion per annum by streamlining UK government administrative processes at a stroke. By enabling government to use its immense purchasing power, e-Invoicing could open up new markets throughout the country and help drive innovation and economic growth."

Stephen McPartland MP.

This report offers guidance to local government organisations on how to make the move to e-Invoicing. Supporting data from the iGov 2015 Survey has been used to provide a snapshot of e-Invoice usage within local government across England. This data is qualified through in-depth interviews with respondents to create this more detailed study. The aim is to enable adoption of e-Invoicing as defined in the Small Business, Enterprise and Employment (SBEE) Act plus other European Commission Directives.

Lastly, with over 45% of public sector respondents to the iGov 2015 survey citing an interest in e-Invoicing, this report goes some way to addressing the appetite for more information.

Are you interested in learning more about e-Invoicing and its implications for your organisation?



iGov 2015 Survey: Interest in e-Invoicing

3. WHAT PROBLEM ARE WE SOLVING?

PAPER AND PDF INVOICES ARE LABOUR INTENSIVE, INEFFICIENT AND COSTLY

Before exploring the benefits of e-Invoicing, it is helpful to understand the disadvantages of the current process. In most cases, this is based on paper invoices received via traditional post and PDF invoices received via email, both of which feed into a typically manual data entry process into an accounting system for ultimate payment. The result is a practice that is labour intensive, unduly time-consuming, inefficient and costly.

It is important to note that many organisations have recognised these issues and made steps to address the problem. These actions will be explored later in this report. However, it is important to note that few have fixed the root cause, nor do these workarounds scale to allow for the adoption of true e-Invoicing.

The costs linked to invoice processing are primarily found around handling, within both buyer and supplier, plus the high level of human interaction within the invoice payment process itself. The invoice receipt-to-payment flow involves multiple people and steps. It starts with the supplier printing and posting their invoice, which is received by the buying organisation a few days later. This is then identified as an invoice and passed to Accounts Payable (AP) for processing and payment. There are two common manual invoice flows, depending on the accounting practice and finance system being used:

1. The paper or PDF invoice is passed to the buyer for approval and returned to AP for processing. AP then creates a payment voucher in the finance system against the invoice, after which the invoice is flagged for payment.

1. AP tries to match the invoice against an order and goods receipt note (GRN). If no order exists, AP creates a new order within the finance application against the invoice and passes the invoice to the buyer for approval. Once approved, the invoice is returned to AP and is ready for payment.

These flows vary by buyer organisation but the principles are common. The following process timeline demonstrates the steps within this process and the likely effort involved:

Process Steps	1. Capture or Receive	2. Enter & Codification	3. Validation & Matching	4. Dispute Management	5. Payment & Cash Management	6. Archiving	Total
Effort	6%	17%	23%	14%	27%	13%	100%

Source Billentis 2015: The Invoice Lifecycle Process

The time it takes to complete this flow varies depending on the size of organisation, complexity of invoice approval and other factors such as purchase order compliance and goods receipting.

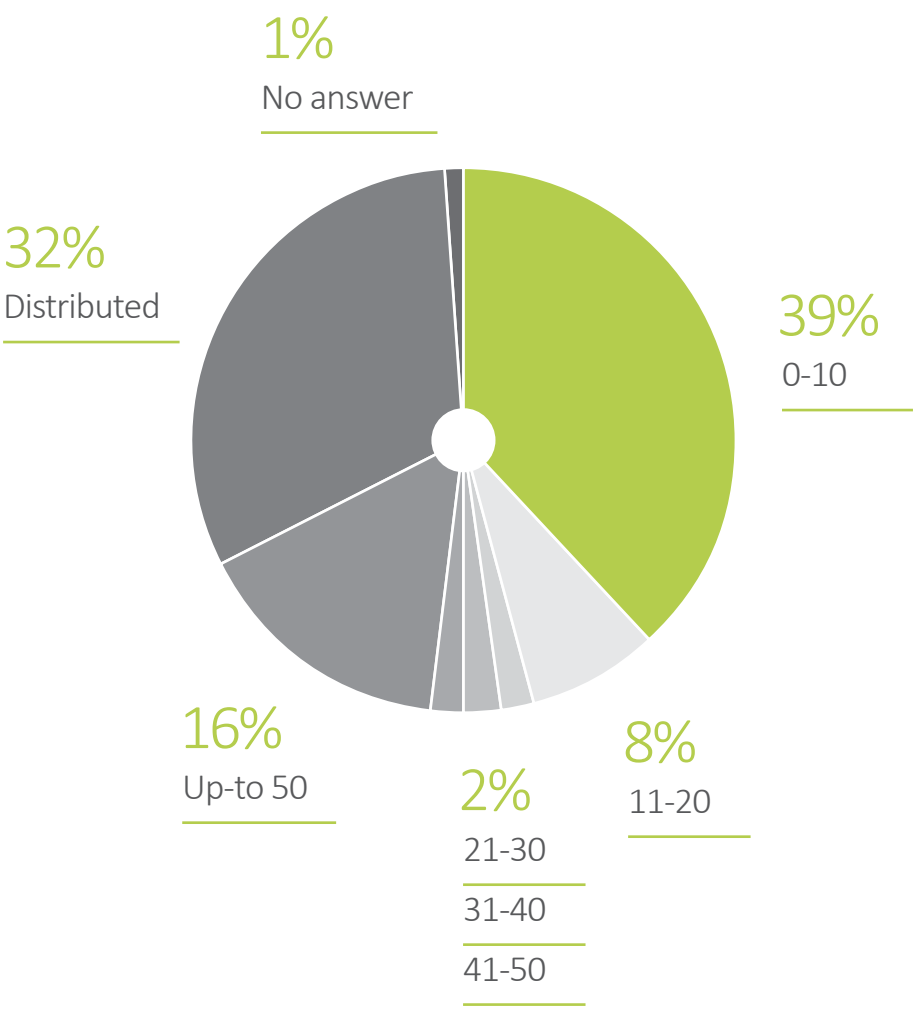
3. WHAT PROBLEM ARE WE SOLVING?

3.1 ORGANISATIONAL SIZE TO SUPPORT PROCESS

The key cost of processing an invoice is the human time needed within the flow. Within most public sector organisations, supplier invoices are processed by two groups of employees: the AP team and the wider buying departments.

Due to increased pressure on Public Sector budgets, AP teams have become leaner. However, the total number of people involved in the invoice process still remains high. The survey indicates that the AP team typically comprises fewer than ten people (39% of organisations) and that in almost a third, the process is distributed across the whole organisation.

Organisation size to support the invoice flow



iGov 2015 Survey: Organisations size of supporting the invoice process

3. WHAT PROBLEM ARE WE SOLVING?

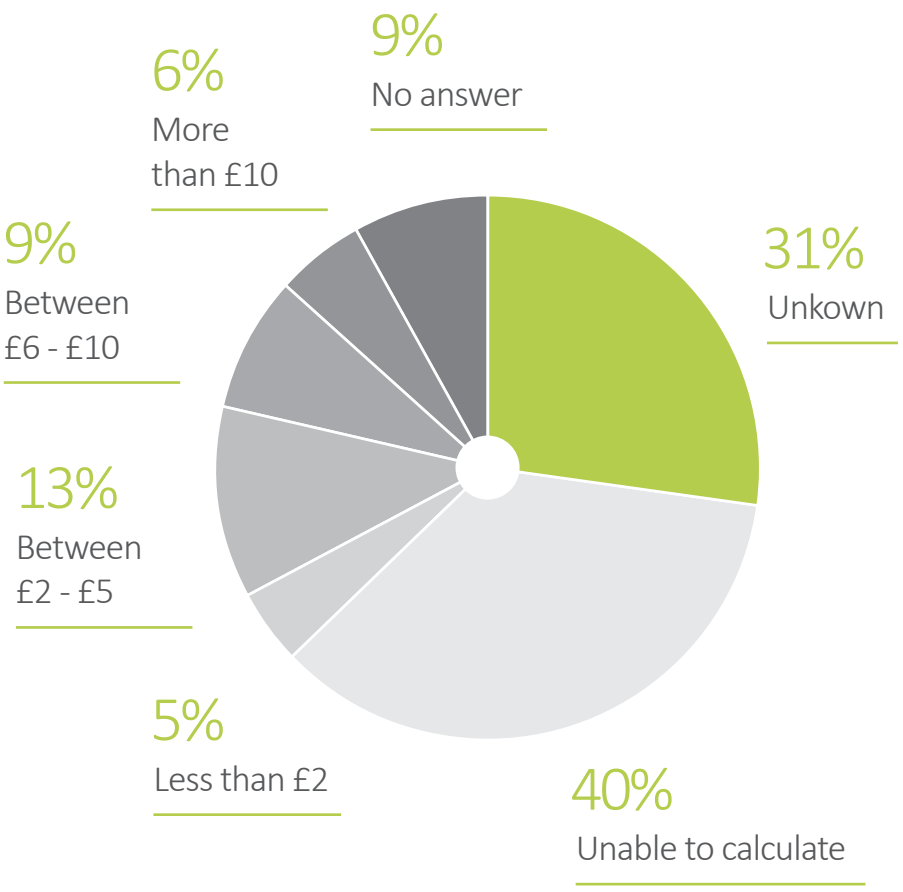
3.2 WHAT IS THE COST OF PAPER?

To build the business case for e-Invoicing, it's vital to know the cost to process a paper or unstructured PDF invoice in order to identify and measure potential savings. The actual cost per invoice depends on what is measured:

- The effort to pre-process the invoice, open, scan or correct content
- The time and resources needed to approve the invoice
- The time taken to locate an invoice and resolve supplier queries

The processing of an invoice involves multiple staff members, each at differing full-time equivalent (FTE) costs and in different locations. This makes it very hard to estimate the true cost per invoice and accounts for the diverse range of figures highlighted in the iGov survey, which excluded the upstream and downstream costs, nor does it take into account the hardware, software maintenance and anti-fraud overheads.

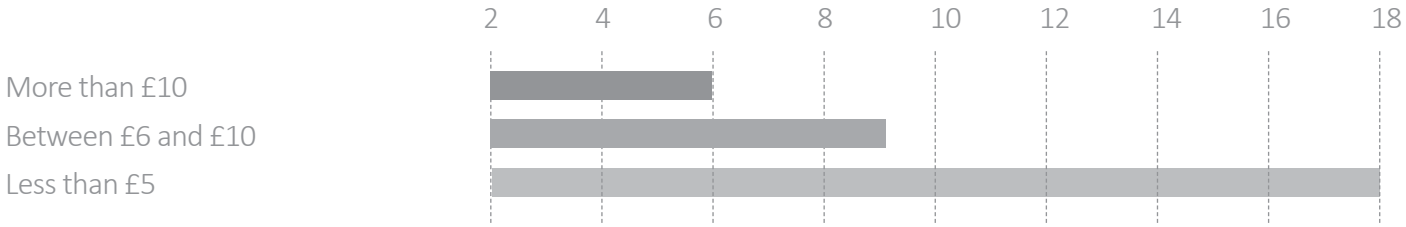
Actual Cost per Invoice Processed



iGov 2015 Survey: Invoice Processing Costs

3. WHAT PROBLEM ARE WE SOLVING?

The Known Costs of the Invoice Process



iGov 2015 Survey: Known Invoice Processing Costs

Although a third of respondents were unable to even calculate the basic cost per invoice for the reasons highlighted, it is still possible to determine the true cost of an invoice, by focusing on the iGov Survey respondents that did know their costs. This gives us a range from under £5 to over £10, yielding an average or baseline cost of **£4.54** per invoice.

To validate these costs, we can look at two other sources: the CIPFA benchmarking Debtor Club figures (CIPFA, 2015) and the Billentis 2015 e-Invoicing Report. The CIPFA figures are based on a range of members within a benchmarking club and therefore provide real costs levels. This gives us five identifiable levels of cost per invoice:

LEVEL	COST PER INVOICE	SOURCE
IGOV AVERAGE	**£4.54**	**iGov Survey 2015**
CIPFA LOWEST COST	**£2.73**	**Debtor Club figures (CIPFA, 2015)**
CIPFA AVERAGE COST	**£7.21**	**Debtor Club figures (CIPFA, 2015)**
CIPFA HIGHEST COST	**£14.41**	**Debtor Club figures (CIPFA, 2015)**
BILLENTIS 2015 REPORT	**€17.60 (£13.38)**	**Billentis Report 2015, E-Invoicing/ E-billing: Entering a new era**

3. WHAT PROBLEM ARE WE SOLVING?

3.2 WHAT IS THE COST OF PAPER?

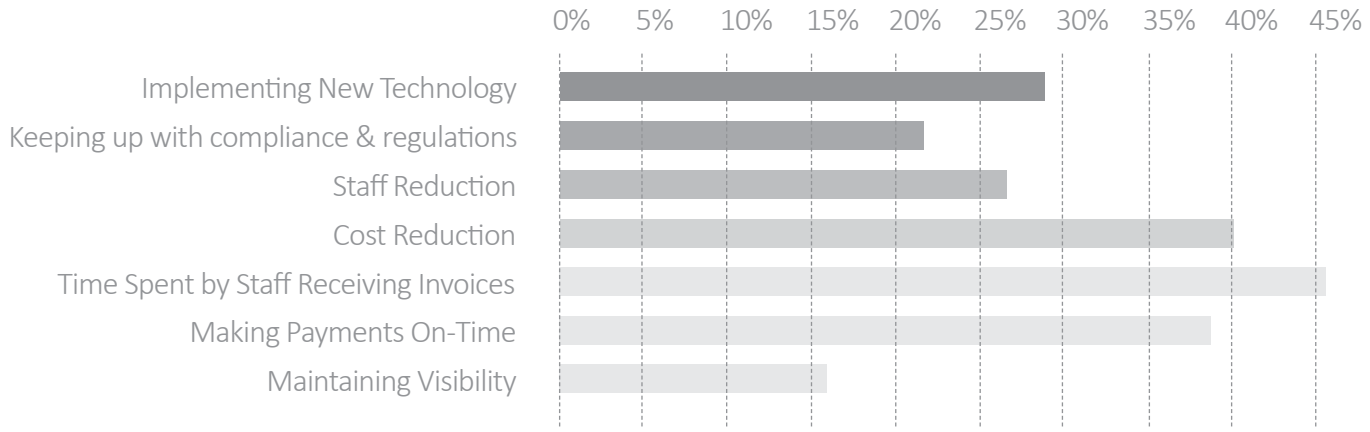
For the purposes of this analysis, the CIPFA highest cost has been applied in the following examples. This can then be mapped against the process effort identified earlier to show how the costs are distributed over the lifecycle of the invoice:

Process Steps	1. Capture or Receive	2. Enter & Codification	3. Validation & Matching	4. Dispute Management	5. Payment & Cash Management	6. Archiving	Total
Effort	6%	17%	23%	14%	27%	13%	100%
Cost	£0.90	£2.46	£3.26	£2.05	£3.93	£1.80	£14.41

Figure 1 Invoice Lifecycle Costs

The importance of addressing the invoice process is clear when we look at the challenges facing Public Sector finance teams. Participants in the iGov Survey highlighted staff time spent processing invoices (46%), cost reductions (40%), and making supplier payments on time (38%) as top priorities – perhaps not coincidentally the three areas that benefit most from e-Invoice adoption.

Challenges Around Invoice Processing



iGov 2015 Survey: Common challenges stopping process improvement

3. WHAT PROBLEM ARE WE SOLVING?

3.3 THE HIDDEN COSTS AND RISKS OF PDF

In a step to remove printing and postage costs, suppliers have started to send invoices via email. Typically, the invoice is a human-readable PDF (Portable Document Format) sent as an email attachment. Unfortunately for the buyer, this can result in an even more complex and costly process. The iGov 2015 survey found that these PDFs are typically printed and then treated as paper invoices. So, although the supplier has saved a few days bypassing the post, this time is offset through the extended process within the buyer. A further critical issue with this method of invoice transmission is that it increases the risk of cyber-crime: the receiver can open an attachment that looks like an invoice, only to find they have inadvertently introduced malware or ransomware into their whole organisation – exposing accounting details, passwords and bank information to the fraudster.

4. THE SAVING OFFERED BY E-INVOICING

E-INVOICING REDUCES HUMAN INTERACTION WITH AN INVOICE

Essentially, e-Invoicing reduces human interaction with an invoice. It removes postage and processing costs at both ends. e-Invoicing acts as a door between the supplier and buyer through which only real invoices can pass, by using the invoice content rather than an image to create the near touchless process. In the best case, the only human touch-point will be to fix any exceptions created through human error on either side. Finally, e-Invoicing reduces the risk of mandate fraud and stops malicious emails being opened by the buyer.

This reduced manual intervention is achieved in the following ways:

- Eliminates the time to open and validate the invoice
- Improves the quality of the invoice content, removing data entry time
- Diminishes the effort needed to process and approve the invoice
- Reduces the inconvenience of resolving a supplier dispute or enquiry
- Cuts down on payment errors and cash allocation
- Removes the time required to store, locate and retrieve documents

The lifecycle process timeline with e-Invoicing looks very different to the paper invoice flow:

Process Steps	1. Capture or Receive	2. Enter & Codification	3. Validation & Matching	4. Dispute Management	5. Payment & Cash Management	6. Archiving	Total
Effort	0%	0%	20%	33%	33%	13%	100%

Source Billentis 2015: 2 E-Invoice Lifecycle Effort

4. THE SAVING OFFERED BY E-INVOICING

The leading study on this topic from the Billentis Group indicates savings of 66% in effort by using e-Invoices compared with paper invoices. It is clear therefore how changing just one step could remove avoidable costs.

Process Steps	1. Capture or Receive	2. Enter & Codification	3. Validation & Matching	4. Dispute Management	5. Payment & Cash Management	6. Archiving
Saving	100%	100%	70%	20%	58%	64%

Source Billentis 2015: Effort saved by using an e-Invoice

This report looks at what measures have been taken to address these costs, the barriers to e-Invoice adoption and the resulting savings.

4. THE SAVING OFFERED BY E-INVOICING

4.1 SAVINGS OFFERED BY E-INVOICING

To understand how e-Invoicing can be used to reduce costs, we need to return to the invoice lifecycle. By its very nature, processing an e-Invoice removes the need to capture or enter any data (steps 1 & 2), while the effort to further process the invoice is also reduced through the high levels of automation offered by true e-Invoicing.

Process Steps	1. Capture or Receive	2. Enter & Codification	3. Validation & Matching	4. Dispute Management	5. Payment & Cash Management	6. Archiving
Saving	100%	100%	70%	20%	58%	64%

Source Billentis 2015: e-Invoice Processing Costs

The possible cost savings can now be identified by overlaying the potential saving with the costs associated with processing paper. If we take the CIPFA highest cost case, the achievable savings per invoice processed is **£9.50**.

Process Steps	1. Capture or Receive	2. Enter & Codification	3. Validation & Matching	4. Dispute Management	5. Payment & Cash Management	6. Archiving	Total
Paper	£0.90	£2.46	£3.26	£2.05	£3.93	£1.80	£14.41
Electronic	£0.00	£0.00	£0.98	£1.64	£1.64	£1.66	£4.91
						Saving	£9.50

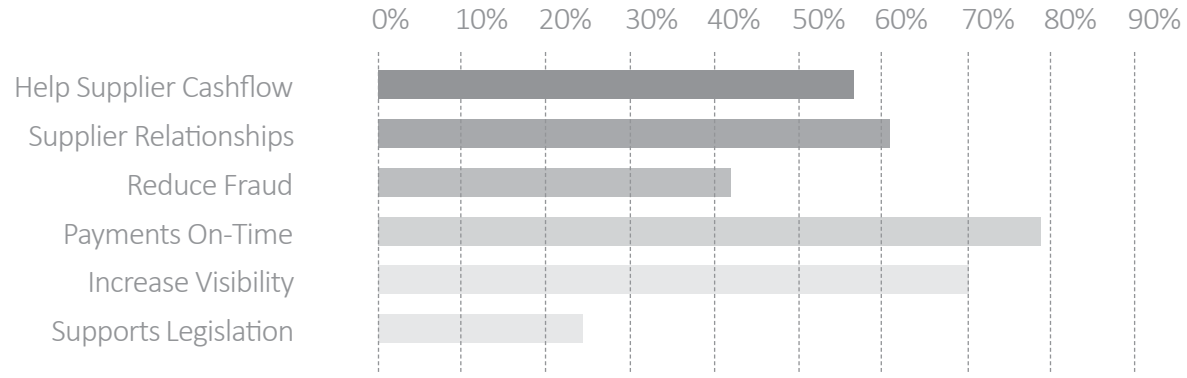
The actual savings will vary by organisation, depending on the processes currently in place and existing levels of e-Invoice adoption.

4. THE SAVING OFFERED BY E-INVOICING

4.2 THE HIDDEN BENEFITS OF E-INVOICING

By using data from the iGov 2015 Survey, we can identify other hidden but equally significant benefits of e-Invoice adoption:

Visible Benefits of e-Invoicing Use



iGov 2015 Survey: Visible benefits of e-Invoicing highlighted by adopters

The "halo effect" of these benefits falls into four main areas:

- Enabling prompt payment of the supplier
- Benefiting the wider economy and suppliers
- Reducing processing cost, waste and fraud for the buyer
- Removing printing and postage costs for the supplier

5. HOW ARE THE COST SAVINGS ACHIEVED?

5.1 VALIDATION & MATCHING SAVINGS

The cost of matching or validating an invoice is reduced through either purchase order (PO) compliance or control over the buyer's order process.

5.1.1 Purchase Order Compliance

To support budgets and stronger expenditure controls, organisations use a PO process. The PO is approved before being sent to the supplier. When the invoice is received, its content is matched against the approved PO to identify any discrepancies, then the invoice is allocated against a budget for payment.

The use of an ePurchasing solution requires high levels of maturity and a cultural change within the organisation. The supplier must reference the PO number on all invoices. When linked to a 'no PO, no Pay' policy, the costs saving can be substantial. This paves the way for the use of portals, virtual payment cards (p-cards) and e-Invoicing.

By ensuring that almost nothing is ordered without an approved PO, an organisation can quickly move up the maturity scale, even in the absence of e-Invoicing. PO compliance creates an organisational protocol that removes significant cost from the downstream process. Although most respondents operate a PO process, very few have full compliance.

"We have enforced a strict "No PO, No Pay" policy across our organisation. It took considerable effort to change the internal culture. However, suppliers have accepted this policy as it results in prompt payment. To force change, we penalise individual departments if late payments are made. It has taken time, but we are now hitting 98% or sometimes 100% of our prompt payment targets."

Newark & Sherwood Council.

With a strong PO policy enforced in the supplier community, the allocation and processing of invoices is simplified. e-Invoicing can be used to police the PO process and reduce errors. Similarly, there are solutions that allow the supplier to "flip" a PO into an invoice, eliminating content errors. When PO compliance is linked to e-Invoicing and workflow, an organisation could recognise the full benefits of e-Invoicing.

5. HOW ARE THE COST SAVINGS ACHIEVED?

5.1 VALIDATION & MATCHING SAVINGS

5.1.2 Buyer Budgeting

Without PO compliance, an organisation can introduce buyer-driven compliance to obtain similar levels of savings; however, this must be linked to invoice workflow and e-Invoicing to be considered 'optimal'.

"We have adopted buyer-level budgeting to drive down costs. The buyer informs the supplier of their unique identifier and the invoice must reference this to be processed promptly. This results in high-levels of automation and allows us to pay 95% of local suppliers within seven days – if they submit a good quality invoice."

Islington Council

5.1.3 Disputes and enquires

There is a high hidden cost linked to an invoice whenever supplier interaction is required, e.g. querying values, checking delivery or handling enquiries about when the invoice will be paid. This requires locating the physical invoice and reviewing the content. Typically, individuals will copy the invoice and return the original to the archive. Alternatively, copies of the invoice are created at each stage of the invoice process (for example, the buyer gets a copy, as do the AP and purchasing teams). The cost of locating a paper invoice, and mandatory storage for up to seven years, is largely hidden. Up to 20% of this cost can be removed from the process if an e-Invoicing, workflow or scanning solution is linked to an electronic archive – a key downstream benefit of invoice automation.

5. HOW ARE THE COST SAVINGS ACHIEVED?

5.2 PROMPT PAYMENT & E-INVOICING

Over one-third of respondents highlighted making payments on time as a key challenge for 2016. By adopting e-Invoicing, this issue can be addressed and new financial benefits are opened up to both the buying and supplying organisations.

5.2.1 Impact of the Prompt Payment Code

One of the most important drivers of Public Sector technology adoption and evolution of the payment culture has been the Prompt Payment Code. Most cite this as a reason for further automation.

The other factor is how organisations measure their adherence to the Prompt Payment Code. All respondents measured the number of days from invoice receipt date, without reference to the supplier's invoice date. At the same time, disputed invoices are removed from the measurement figures to avoid negatively impacting KPIs on prompt settlement. One of the changes highlighted in the Lord Young reforms to the 2015 Public Contract Regulations and updates to the SBEE Act moves the measurement from receipt date to approval date. In this way all invoices – including disputed ones – will now be factored into the measurement. This will drive e-Invoice adoption as structured e-Invoicing leads to faster approval. This in turn makes early settlement discounting and rebates via e-payments viable as cost reduction tools.

5.2.2 Cost of payments

Once an invoice has been approved by the buyer, it moves into the payment cycle to be settled in the next payment run. This is done either by BACS, CHAPS or, very rarely, cheque. Each payment is approved by Finance, then submitted and paid. This process effectively takes about 1 minute and 40 seconds per invoice but the lapsed time is closer to one or two days. The payment run is then performed daily, weekly or fortnightly. It typically takes 1 – 3 days for the funds to clear into the supplier's account (longer with a cheque). Between 3 and 7 days can elapse from invoice approval to cash being with the supplier. During this time, the supplier will start to chase for payment, adding to the cost of the process on both sides.

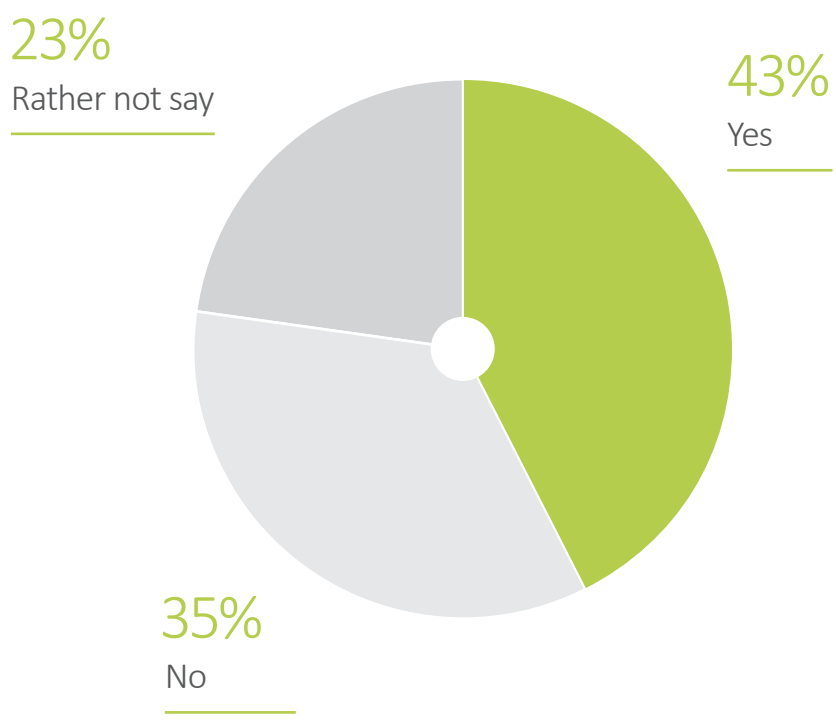
6. E-INVOICING & FRAUD PREVENTION

EVERY DAY, THE PUBLIC SECTOR IS EXPOSING ITS EMPLOYEES TO THE THREAT OF CYBER CRIME

Every day, the Public Sector is exposing its employees to the threat of cyber crime. It can go unnoticed for months, affecting the individual or whole organisation. It can be used to steal personal bank details, passwords, even copy whole databases of information. To address this threat, anti-virus software is essential but this is always one step behind the cyber-criminal.

The obvious vulnerability is email and in particular, a supplier invoice, which provide a back-door for the criminal. Today, it is easy to create a spoof email address, build a dummy invoice or add a virus or worm looking like an invoice to an email. Therefore, every emailed invoice is a fraud risk. This could be an attempt at mandate fraud or a cyber-attack.

Organisations Targeted by Fraudsters

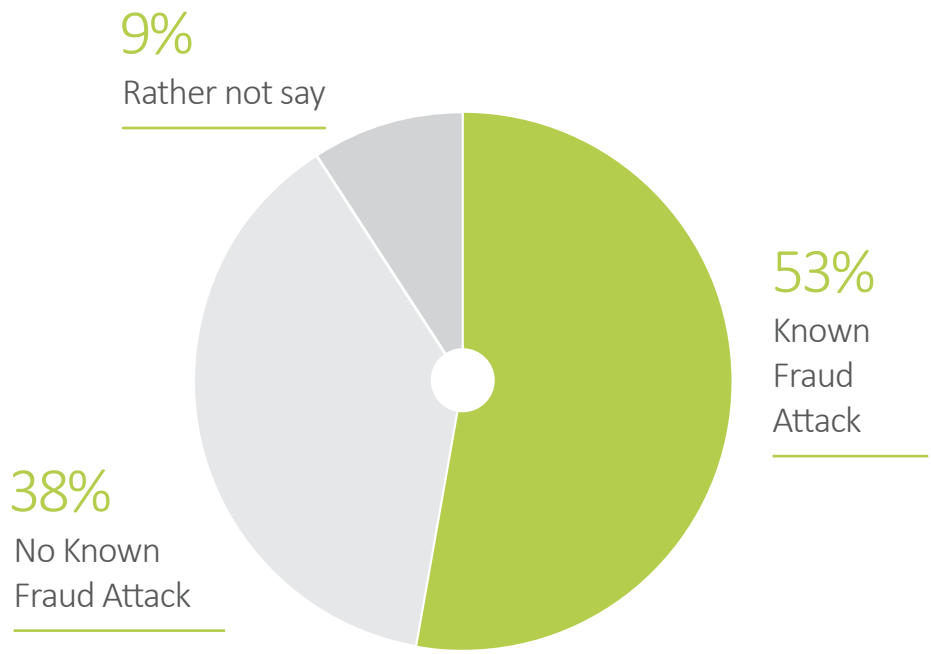


iGov 2015 Survey: Respondents target by fraudsters

6. E-INVOICING & FRAUD PREVENTION

The iGov 2015 Survey data also shows that e-Invoicing has been used to support fraud prevention where a risk has been identified, with 53% of organisations able to prevent an attack..

Fraud Attacks Prevented in Organisations with E-Invoicing



iGov 2015 Survey: Respondents using e-Invoice to trap fraud attacks

6. E-INVOICING & FRAUD PREVENTION

6.1 RECOGNISING THE PROBLEM

One of the compelling benefits of e-Invoicing is end-to-end visibility into the process – identified by over 70% of respondents. Crucially, e-Invoicing acts as a conduit through which only real invoices can reach an organisation. With the right policies in place, users are no longer exposed to the risk of opening a bogus invoice. When coupled with automated auditing, e-Invoicing can reduce fraud risk across the entire process. Common risk areas addressed are:

- Accessing the organisation's confidential data via malware or ransomware worms
- Cloned invoices with amended payment details
- Fishing for automatic payment levels against invoices
- Buyer/supplier collaboration on fraudulent or duplicate invoices

While these fraud risks can be dramatically reduced, it is important to note that organisations can't reduce attempted fraud but can measure a reduction in successful fraudulent activity. With 43% of respondents indicating that they had been targets of fraud, there is clearly an issue that needs to be addressed across the public sector as a whole. Preventative measures can only be taken if the organisation first acknowledges the risks.

6.2 STOPPING RANSOMWARE EMAIL ATTACHMENTS

The e-Invoicing solution should identify the supplier sending the email, open the email automatically and extract the invoice content. If the email is from an unknown supplier it will be rejected, if the attachment is not an invoice, it will be deleted. Therefore, the e-Invoice service will only transmit a real invoice from a known supplier. This solution needs to be underpinned by a strict "no personal email" invoice policy within the buyer organisation. This policy should be communicated to suppliers and enforced. While this reduces risk, 'outside the policy' human error is still possible.

6. E-INVOICING & FRAUD PREVENTION

6.3 TACKLING INVOICE CLONING (MANDATE FRAUD)

In today's digital age, it is a simple task to clone a company email address, create a bogus PDF invoice and transmit it to a buying organisation as if it were from a genuine supplier. The only difference is the bank account details on the invoice. To address this risk, e-Invoicing solutions authenticate the origin of the invoice and can be configured to validate supplier data.

This validation process flags any changes to the bank account and requires verbal or written confirmation from the supplier before account details are changed. However, if the fraudster is working with someone inside the buyer's organisation, the final hurdle is to verify the invoice has been sent from the real supplier. This can be achieved with either a digital signature on the invoice or through a link between the supplier's genuine email address and the address of the sender. This would be provided within the business control layer between the receipt and approval workflow.

6.4 ADDRESSING APPROVAL THRESHOLD

Paper-based approval processes, without any level of PO compliance, are at high risk of fraud, especially in organisations that automatically pay invoices under a certain value. If a fraudster is aware of the minimum invoice approval level within the target organisation, fraud is simple: by sending a PDF invoice under the threshold value, the invoice is automatically approved and paid. Fraudsters can simply go a on a 'fishing expedition' to find suitable targets. By introducing e-Invoicing and approval workflows, these thresholds are removed and 'fishing' is stopped overnight.

6.5 STOPPING COLLABORATIVE FRAUD

e-Invoicing creates multiple obstacles to collusion between individual buyers and suppliers between whom there is an agreement to pay duplicate or bogus invoices. This type of fraud relies on poor visibility of the invoice process and weak controls around duplicate payments. e-Invoicing offers more transparent payment processes with audit trails and matching of invoices to suppliers and orders. In parallel, the introduction of automated payments reduces the number of touch-points between buyer and supplier around an invoice. These steps, combined with cultural change, can help an organisation reduce the risk of collaborative fraud.

6. E-INVOICING & FRAUD PREVENTION

6.6 STOPPING DUPLICATE PAYMENTS

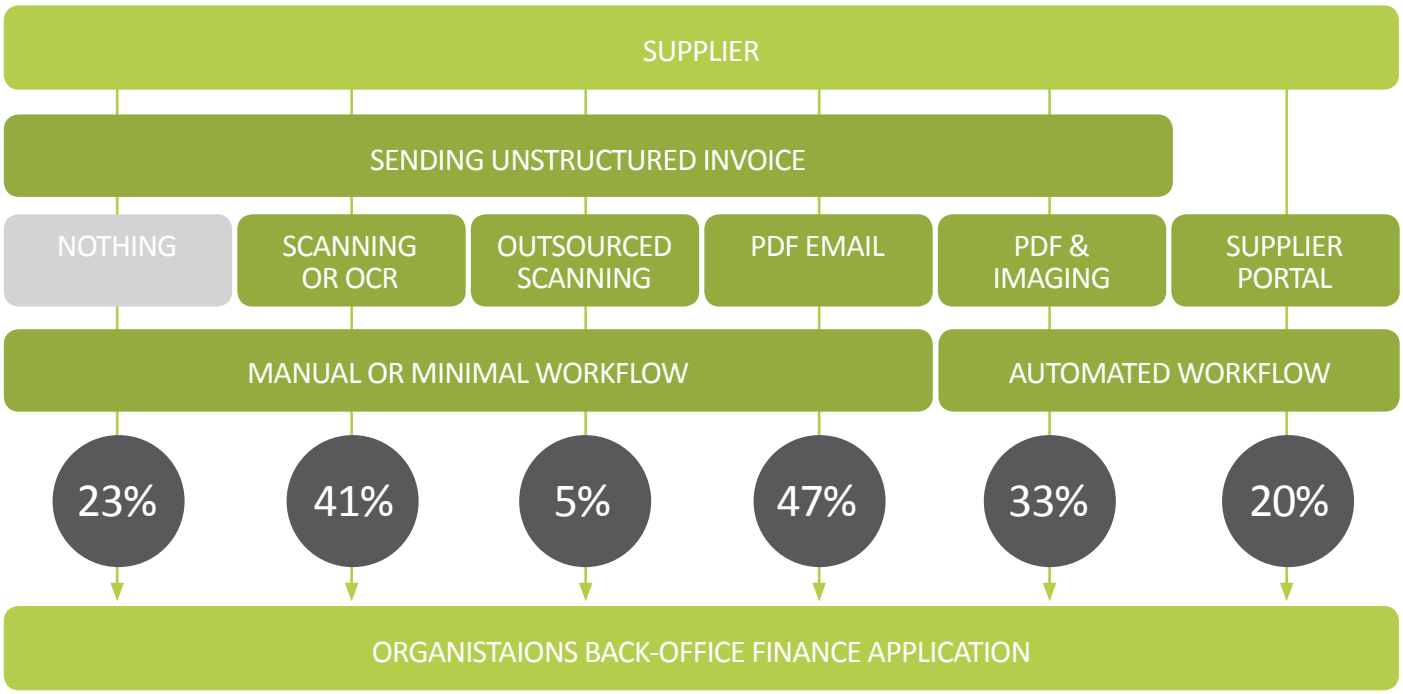
It is not uncommon for suppliers to send multiple copies of an invoice into a buying organisation. Typically, this is not deliberate fraud but arises through poor payment practices or lack of visibility into invoice status. In such cases, each copy invoice is processed, approved and sent for payment. It is only at this point that, with additional approval workflow around payments, duplication will be identified. Often, if a duplicate payment is made via automated fund transfer, neither party will identify the issue until year end. Duplicate payments therefore create accounting and VAT errors in both organisations.

To address the problem of duplicate payments, the e-Invoicing solution needs to include the capture of all invoice feeds from suppliers via a business control layer, whereby duplicate invoices are removed from the process and returned to the supplier.

7. TACTICAL APPROACHES TO INVOICE AUTOMATION

EXISTING INFRASTRUCTURE IS AN IMPORTANT FACTOR IN THE COST SAVINGS ACHIEVABLE FROM E-INVOICING

When looking at e-Invoicing strategy, existing infrastructure plays an important part in what is possible and within what timeframes. Data from the iGov 2015 Survey reveals the technologies and levels of automation in use today. Existing infrastructure is an important factor in the cost savings achievable from e-Invoicing, particularly considering that IT resourcing is a major challenge facing organisations today. It's also evident that almost a quarter of the respondents currently have no e-Invoicing capabilities.



iGov 2015 Survey: Technology in use today to support invoice processing

7. TACTICAL APPROACHES TO INVOICE AUTOMATION

7.1 SCANNING & OCR – 41% COVERAGE

This process involves scanning a paper invoice and turning it into an image. The invoice content is then extracted using optical character recognition (OCR) technology. This eliminates the hidden costs of retrieval and copying. However, it does introduce a new cost around ownership of the OCR technology.

This quick-fix solution has been adopted by 41% of respondents. The potential savings depend on the investment made. However, there will still be some effort required to scan and validate the invoice content. Furthermore, this technology does not support the structured e-Invoicing standards stipulated by the European directives or SBEE Act.

7.2 OUTSOURCED SCANNING – 5% COVERAGE

A third-party organisation captures the invoices and uses OCR and e-Invoicing technology to return an image and invoice content to the AP team. This eliminates the costs of handling the invoice, maintaining OCR software and scanners, retrieval and copying. Outsourcing this process creates a clear cost per invoice as a service. Although this is the fastest way to remove direct costs from the process, only 5% of respondents have moved in this direction. There may still be some effort required to validate the original paper content. Outsourced scanning does not support the structured e-Invoicing standards stipulated by the European directives or SBEE Act.

7.3 PDF EMAIL 47% COVERAGE

PDFs are a key part of the e-Invoice journey, especially for suppliers. Over half of organisations support PDF email but the majority are cancelling out the benefits, as follows:

7.3.1 Unstructured PDF email

Most respondents receiving PDFs via email reported that they print out hard copies. Not only does this introduce new costs into the existing process, it also nullifies the advantage of using PDFs. At best, processing PDFs as unstructured e-Invoices is cost-neutral; at worst, it actively adds cost to the overall process and exposes employees to the risk of cyber-crime.

7. TACTICAL APPROACHES TO INVOICE AUTOMATION

7.3 PDF EMAIL – 47% COVERAGE

7.3.2 Structured PDF email

The supplier emails a structured PDF which is passed automatically into the AP process via an e-Invoice service. Structured e-Invoices avoid 100% of the receipt and capture costs and shield the buyer from a cyber-attack. With a high percentage of suppliers sending structured PDFs by email, buyers can potentially achieve instant savings. However, although creating greater efficiencies, additional functionality will be required to support the European CEN/PC 434 standards.

7.4 IMAGING AND WORKFLOW – 33% COVERAGE

This process combines document imaging or outsourced scanning with electronic invoice workflow to create a more robust and auditable end-to-end process. Approval workflow allows an approver to view a digital image of the invoice and its content on any device, at any time. Supporting a more flexible working environment reduces paper waste and accelerates the approval process. This type of automation can be extended to include automatic matching against POs and even cash allocation against budget. It removes many of the visible and hidden costs associated with the invoice process but does not address the root causes, such as poor PO compliance. When linked to structured e-Invoicing, an organisation can create a touchless process. The potential savings are high, yet this type of robust process is only in use by 33% of respondents.

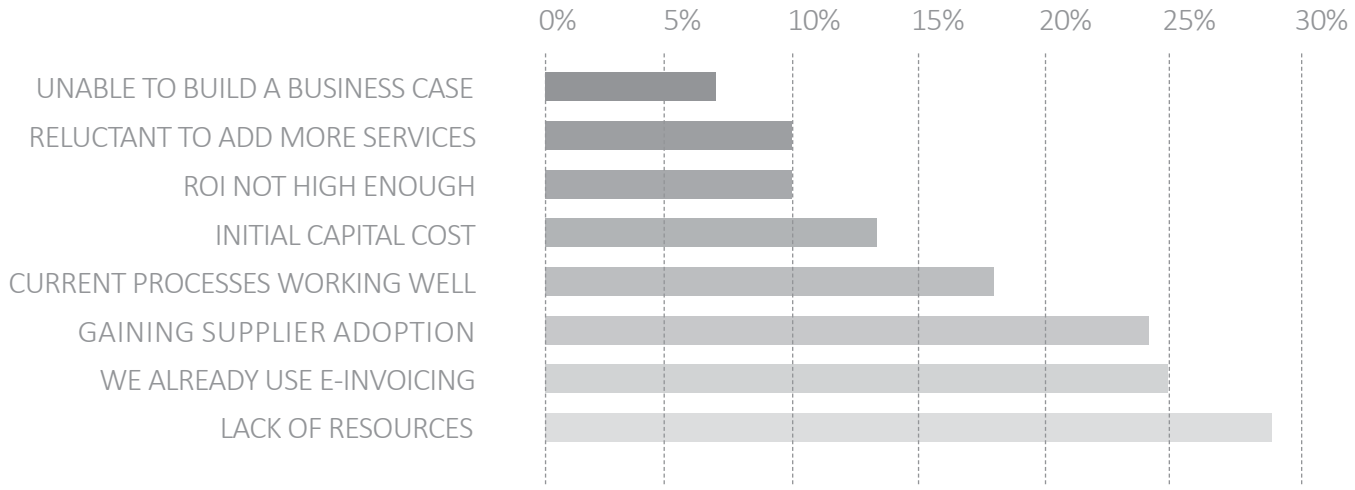
7.5 SUPPLIER PORTAL – 20% COVERAGE

Some organisations provide suppliers with a web portal through which they can create an invoice or 'flip' a purchase order – converting it automatically into an invoice. The portal may have incremental functionality such as invoice status checking, self-service payments or live chat to resolve invoice queries contextually. The facility eliminates receipt and capture costs by creating structured e-Invoices, and can remove 100% of approval costs if used in conjunction with PO compliance. While portals are currently employed by just one in five respondents, their use is an important step towards enabling supplier e-Invoicing. Although suppliers with a high throughput of invoices may not be willing to use such a portal, it can be beneficial to micro or ad-hoc suppliers.

8. REMOVING THE BARRIERS TO E-INVOICING ADOPTION

The iGov Survey reveals the main barrier to e-Invoice adoption is a fundamental lack of resource – both in internal IT and finance teams – highlighted by 28%. This was followed by gaining supplier buy-in (24%) and a perception is that the current process is "good enough" (17%).

Barriers to e-Invoicing adoption



iGov 2015 Survey: Key barriers to e-Invoice adoption

8. REMOVING THE BARRIERS TO E-INVOICING ADOPTION

8.1 GAINING SUPPLIER ADOPTION

The importance of suppliers in driving excellence must not be underestimated. All suppliers – regardless of size, maturity or volume of invoices they generate – are looking for savings, and new markets and opportunities to increase revenue. Just as local government can achieve excellence, so can their suppliers. Through e-Invoicing, suppliers can access the global economy and do business across borders. The opportunities for UK plc in enabling suppliers with e-Invoicing will come not only domestically but also from the global marketplace.

Therefore, without supplier co-operation, any e-Invoicing project is destined to fail, evidenced by almost a quarter of respondents citing supplier adoption as a barrier to e-Invoicing. This is underscored by 62% of those who already have e-Invoicing stating an improvement in the supplier relationship as a consequential benefit. While this report doesn't cover the full scope of supplier adoption, the key to success is to ensure that every supplier has an option that suits their invoicing requirements and perceives clear economic value.

Well-structured on-boarding projects can achieve very high levels of adoption; however, this needs to be coupled with internal cultural change and a flexible approach. This combination can yield:

- Improved supplier relationships
- Assisting supplier cash flow
- Making payments on time
- Improved visibility of the invoice process

Better supplier relationships reduce the buyer's internal costs. In turn, the buyer can strengthen negotiations with the supplier by reducing their cost of sale and offering prompt payment of high quality invoices.

8. REMOVING THE BARRIERS TO E-INVOICING ADOPTION

8.1 GAINING SUPPLIER ADOPTION

8.1.1 Supplier Savings

The supplier stands to make visible savings through the creation and transmission of an e-Invoice, including:

- Reduction in postage and paper
- Reduced printing and envelope costs
- Fewer credit notes and copy invoices

More importantly, e-Invoicing also improves the cash collection process by removing the barriers to invoice approval. This reduces the overall cost of credit control and debt management. If linked to automated payments or supply chain financing, e-Invoicing can additionally lower the cost of invoice reconciliation. These measures benefit the supplier through:

- Lower cost of sale through the reduction in credit control overhead
- Faster access to cash through the accelerated approval of invoices
- Access to funding through a guarantee of payment by the public sector buyer

The Billentis 2015 Report indicates a possible 59% saving for the supplier through e-Invoice adoption.

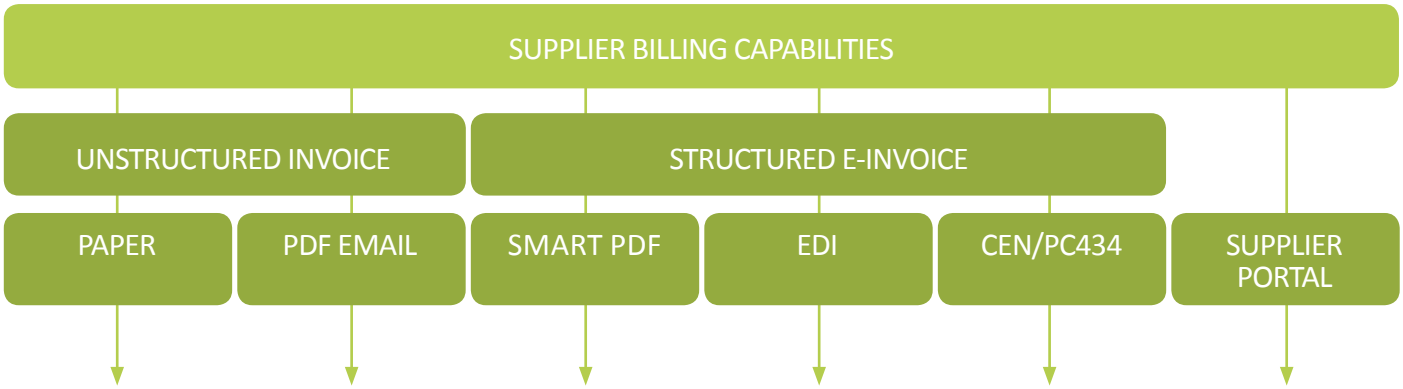
Finally, e-Invoicing is a sales tool and therefore an opportunity. Therefore, the perception within local government needs to shift from simply 'free to the supplier' to 'free to receive'. The public sector as a whole should not be paying to automate their suppliers and remove inefficiencies within the supplier organisation. However, rekeying an invoice into a portal consumes supplier resources and posting an invoice incurs a multitude of costs that are ultimately passed on to the buyer. While the supplier should not be charged for an e-Invoice to be received by the buyer, the supplier may be happy to pay to reduce their own internal processing costs. The smart supplier will see e-Invoicing as an opportunity to sell more goods or services, at a lower cost of sale, to more customers.

8. REMOVING THE BARRIERS TO E-INVOICING ADOPTION

8.1 GAINING SUPPLIER ADOPTION

8.1.2 Supplier Invoicing Capabilities

While EU legislation is focused on the receipt of structured invoices from the supplier, the following tables shows the invoicing methods that need to be considered in any e-Invoicing strategy:



Technology: Supplier Invoicing Capabilities

8. REMOVING THE BARRIERS TO E-INVOICING ADOPTION

8.1.2 Supplier Invoicing Capabilities

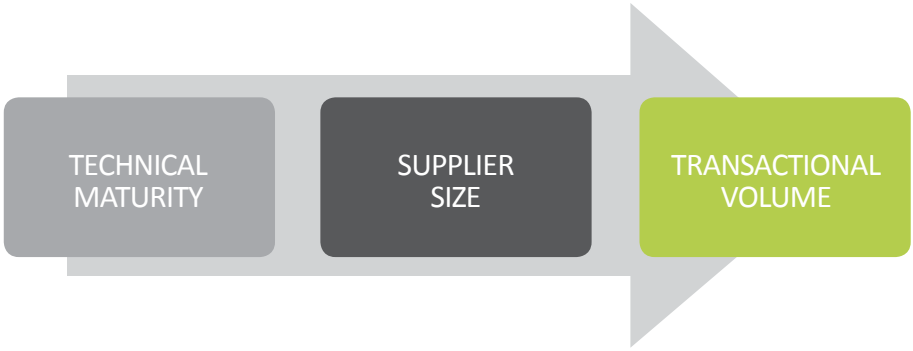
METHOD	E-INVOICE CHARACTERISTIC	SUITABILITY
Supplier Portal	The invoice content is keyed into the buyer's website or shared portal. Can be linked to PO flipping and e-payments. The portal creates an e-Invoice.	• low volumes (up to 39 invoices per month) • micro or small businesses • early adopters
Structured PDF Invoice	The invoice is created by the supplier's ERP or finance application and emailed to the buyer. The buyer requires an intelligent application to convert the PDF into an e-Invoice.	• mid volumes (4 - 150 invoices per month • small to corporate • quick solution for internal adoption
Structured XML Invoice (CEN/PC434)	The e-Invoice is created by the supplier's ERP or finance application. It is then either loaded into or transmitted to the buyer via a secure connection. The e-Invoice is loaded directly into the buyer's back-office systems. Connections can be one to one, many to one or many to many (e.g. PEPPOL).	• high volumes of over 150 per month • corporate or global • long term relationships
EDI	The e-Invoice is created by the supplier's ERP or finance application and transmitted to the buyer via a secure connection. The e-Invoice is loaded directly into the buyer's back-office systems. Each connection is configured to support the buyer/ seller relationship.	• high volumes of over 430 per month • corporate or global • solution for long term strategic relationships
Unstructured PDF or Paper Invoice	The supplier posts or emails an unstructured PDF invoice to the buyer. The invoice is scanned, converted by OCR and validated to create an e-Invoice which is loaded in the buyer's back-office systems.	• mid volumes of over 40 per month • mid-term solution for laggards

8. REMOVING THE BARRIERS TO E-INVOICING ADOPTION

8.1 GAINING SUPPLIER ADOPTION

8.1.3 Supplier Characteristics

There is also a common misconception that suppliers won't or can't adopt e-Invoicing. As with buyer adoption of e-Invoicing, supplier adoption will be driven by a three core factors:



8.1.4 Supplier Maturity

SUPPLIER MATURITY	CHARACTERISTIC
Early Adopter	Willing to try new technology to gain new customers or market share – target with best connection method for the supplier.
Mainstream	Chooses established technology based on competitive pressure – will use portals or PDF as first pass of e-Invoicing.
Late Majority	Unwilling to change process until the majority of suppliers have moved – will wait for mandates.
Laggard	Unwilling to change until there is no other choice.

8. REMOVING THE BARRIERS TO E-INVOICING ADOPTION

8.1 GAINING SUPPLIER ADOPTION

8.1.5 Supplier Size

SUPPLIER SIZE	CHARACTERISTIC
Small or Micro Suppliers	May be willing to access websites, portals or use apps via mobile devices to create an invoice rather than become locked into paper-based processes.
Medium Business	Maintains local control over the invoice creation process and may already send invoices as PDF emails – target for early adoption of PDF.
Large Corporate	Has limited control over their billing system; will need to build the business case to change processes. May have structured PDF invoice capabilities from core ERP. ICT resources are limited.
Global Enterprise	Has limited control over their billing system but have had to make changes to support international sales offices. e-Invoicing is on the strategic roadmap but ICT resources are limited.

8. REMOVING THE BARRIERS TO E-INVOICING ADOPTION

8.2

8.2.1 Invoice Volumes

TRANSACTIONAL VOLUMES	E-INVOICE CHARACTERISTIC
<4 Month	Rekeying content into a portal is a good option, otherwise likely to remain with paper or PDF email.
4 - 39 Month	Rekeying into a portal is an option but e-Invoicing should be part of the contract; otherwise PDF email may be a good option for critical suppliers.
40 - 150 Month	Volumes high for portal use but may be an option if the sales values are commensurately high. Otherwise structured PDF or structured xml invoices if possible.
150 - 430 Month	Volumes require structured PDFs or structured xml.
>430 Month	Volumes require structured PDFs or structured xml, traditional focus of electronic data interchange (EDI) market.

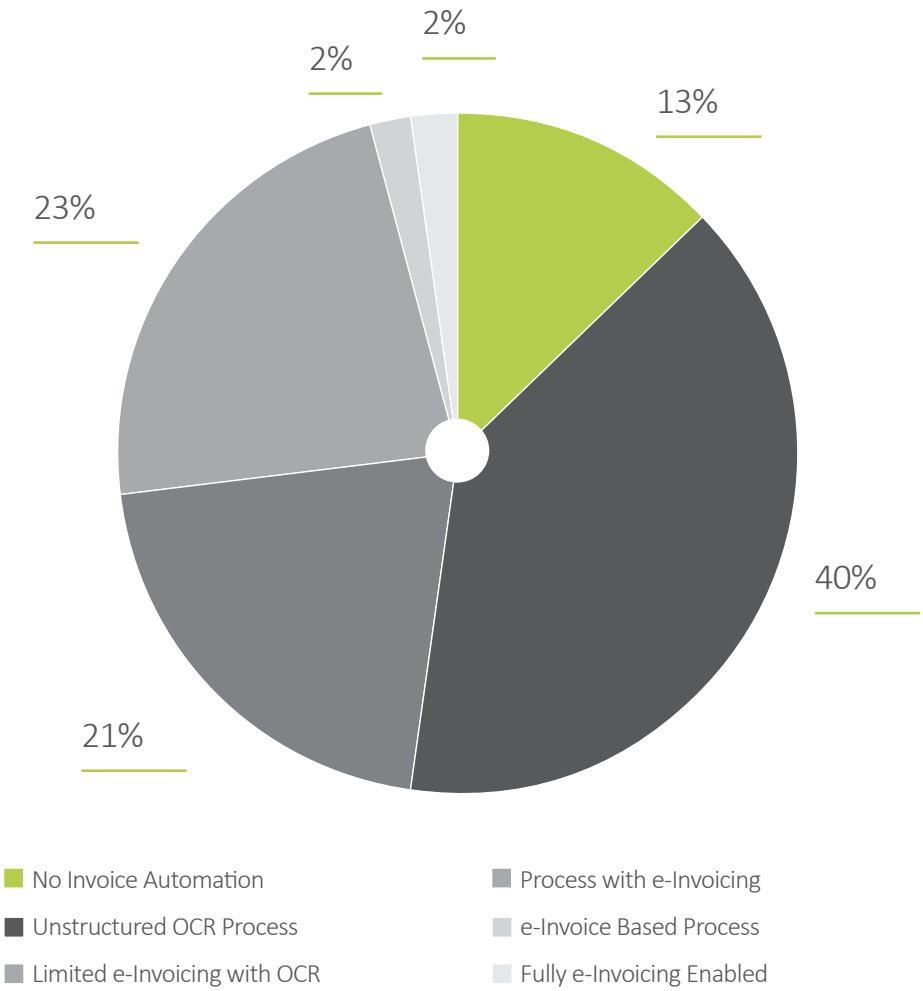
8. REMOVING THE BARRIERS TO E-INVOICING ADOPTION

8.3 WE ALREADY HAVE E-INVOICING OR OUR CURRENT PROCESS IS GOOD ENOUGH

To understand these objections, we need to understand the prevailing culture and processes. As e-Invoicing is not a single change but a series of enhancements, what is 'good enough' for today may not be fit for the challenges of tomorrow.

The vast majority of such respondents to the iGov survey had limited e-Invoicing capabilities. Most are printing out PDFs from emails, effectively treating the e-Invoice as unstructured paper invoice. To drive change, the true benefits of e-Invoicing must be calculated and a strong business case created.

Those with a 'good enough' process measured against actual e-Invoice usage



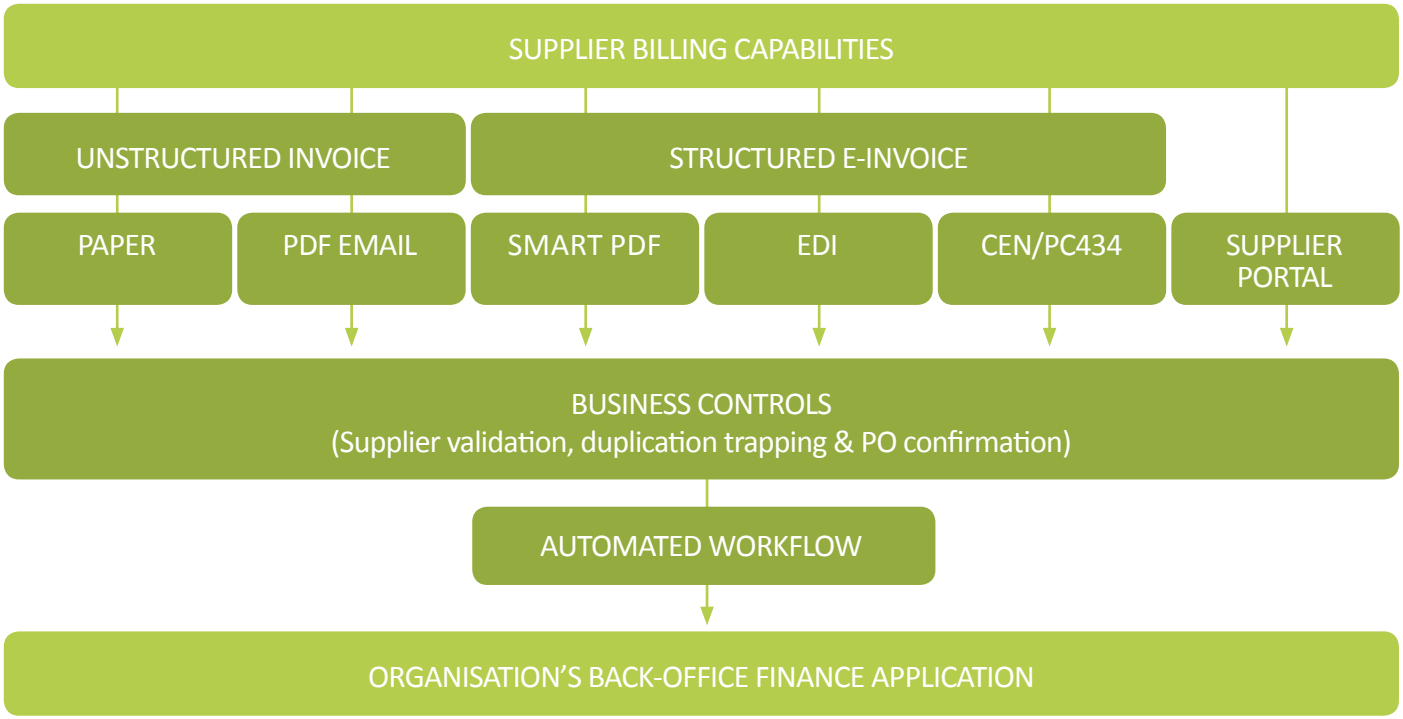
iGov 2015 Survey: Perception of good against organisation maturity

8. REMOVING THE BARRIERS TO E-INVOICING ADOPTION

8.3 WE ALREADY HAVE E-INVOICING OR OUR CURRENT PROCESS IS GOOD ENOUGH

To fully embrace e-Invoicing, an organisation needs to support the full range of invoice types. This needs to cover any existing technology plus new and emerging invoicing methods including CEN/PC 434. The organisation also needs to understand fraud risks and its exposure to cyber-crime.

Furthermore, to correctly identify a supplier and stop duplicate invoice payments against the same invoice submitted by different methods, some form of business control layer is also required. Combining supplier invoicing capability with the need to manage the invoice capture process provides a more sophisticated view of the requirements, namely: multiple invoice receipt methods, common business controls to manage separate streams, plus an approval workflow to support exception management.



Technology: Complete e-Invoicing requirements

8. REMOVING THE BARRIERS TO E-INVOICING ADOPTION

8.4 LACK OF RESOURCES OR RELUCTANCE TO ADD SERVICES

With IT stretched to capacity, making changes to any organisation's systems requires careful planning. Most IT teams have a 6 – 12 month backlog of projects. A new project will either delay an existing initiative or have to join the queue.

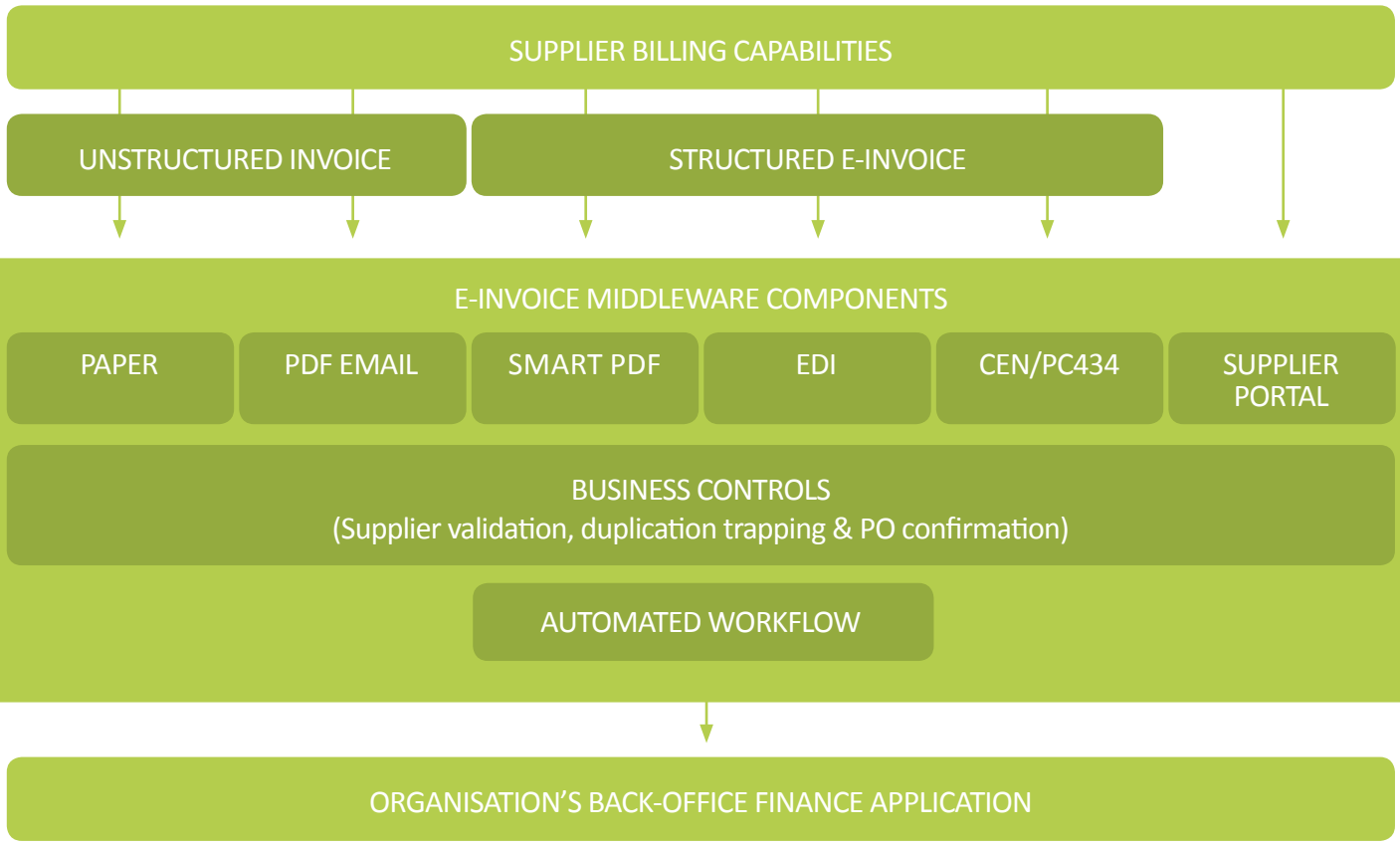
The issue is compounded by the complexity of back-office systems required for departments such as housing, social welfare and libraries. The net result is that each department has discrete procurement, goods receipt, invoice approval and payment processes within the same organisation.

"One of the biggest challenges to progressing with e-Invoicing is simply the number of back-office systems we have. Today we have different processes to support these and e-Invoicing will need to cater for each, especially around content. We are then faced with how we can change these systems without impacting ICT resources. ICT is stretched and we are reluctant to add more projects."

Moray Council

Lessons can be learned from the private sector by introducing a middleware layer across the disparate back-office solutions. This layer is made of components which are typically interchangeable to enable the reuse of any existing infrastructures. It provides a single view of the organisation to the supplier and routes the financial documents to the back-office systems accordingly, trapping duplicate invoices, validating the supplier and confirming PO information in the process. Typically this layer would also include PO or Invoice Approval workflow for auditing and visibility across the systems.

8. REMOVING THE BARRIERS TO EINVOICING ADOPTION



Technology: e-Invoicing middleware components

This type of middleware solution could be cloud-based or on premise. Cloud-based services are increasingly used to reduce the impact on internal IT departments, with costs linked directly to consumption of the service. Few IT resources are required beyond the selection, implementation and testing stages of a project. However, it is important to ensure the IT culture is flexible enough to work with third-party solutions and cloud services.

9. WIDER ECONOMIC BENEFITS OF E-INVOICING

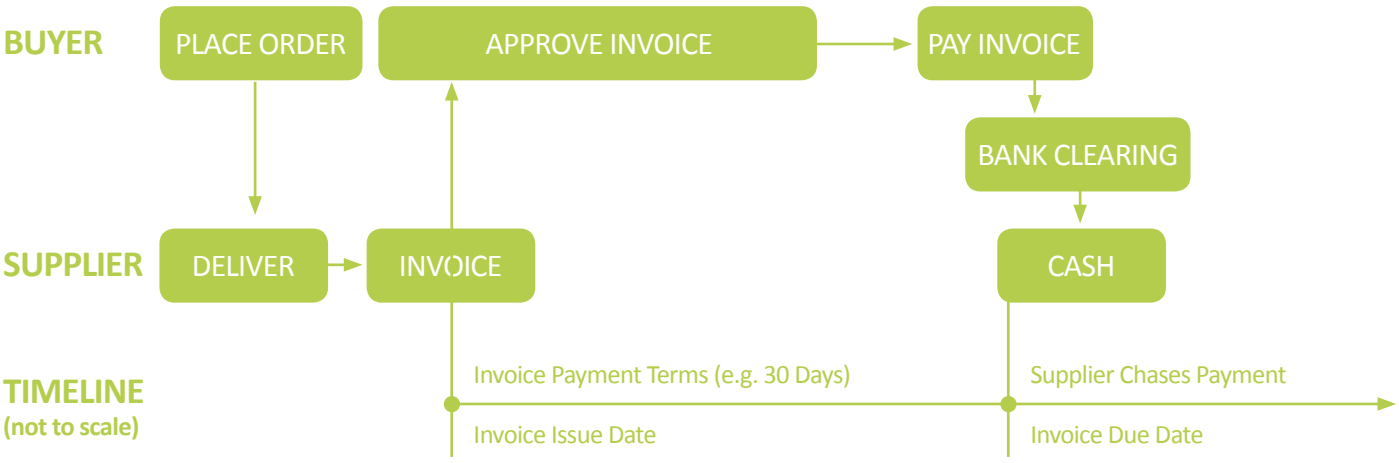
PROMPT PAYMENT

The value chain of any company or organisation is the core process that keeps the business running on a day-to-day basis. This value chain or supply chain consists of a number of actions ranging from initiating purchases to paying for the delivered goods (purchase-to-pay) and from receiving orders to getting paid (order-to-cash). The whole process has a number of key steps within which the elapsed time from the sales invoice being raised to the final payment being made are dictated by the agreed terms and conditions. However, as the paper-based process is cumbersome, this typically results in a buyer being unable to approve invoices on time and consequently leading to late payment. This means that cash stays trapped within the supply chain, impacting the availability of working capital for suppliers. By introducing electronic invoices, the commitment to pay on time can be honoured.

There are a number of appropriate financing solutions in the market, which can be used individually or in combination. This depends on factors such as the relationship between buyer and supplier, the context of the transaction, available working capital and available data.

All support the Prompt Payment Code and the benefit for all parties significantly increases with the integration of e-Invoicing.

Standard Order to Cash Cycle



Cash Cycle: Standard payment method 1

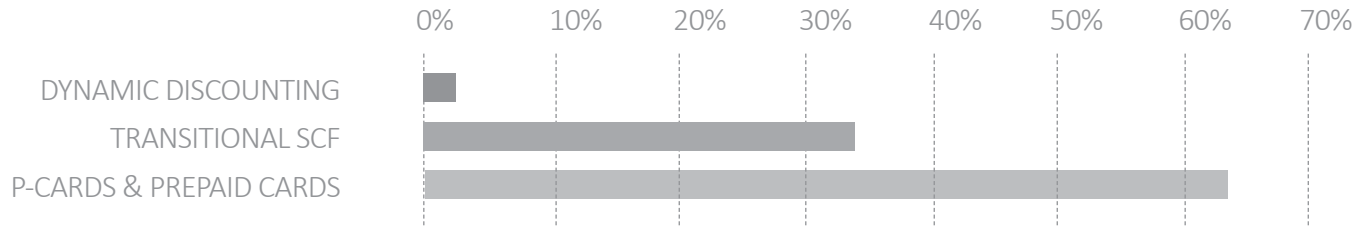
9. WIDER ECONOMIC BENEFITS OF E-INVOICING

PROMPT PAYMENT

The "halo effect" of electronic invoicing is achieved by integrating e-Invoicing with payment and potentially financing services. Cash that is trapped in the supply chain can now be released on or even within the agreed terms, and flow into the local and national economy via the supplier. This not only has a direct impact on the working capital position of both the buyer and the supplier, but strengthens the wider economy, as the various supply chains strengthen and start to flow more smoothly.

Prompt payment initiatives, where e-Invoicing is integrated with payment and financing services, can release cash early in a number of ways. This can be realised either at the supplier end or initiated by the public sector buyer. The following options have been in existence for some years but have recently started to attract more attention.

New Payment & Financing Methods



iGov 2015 Survey: New payment methods linked to e-Invoicing

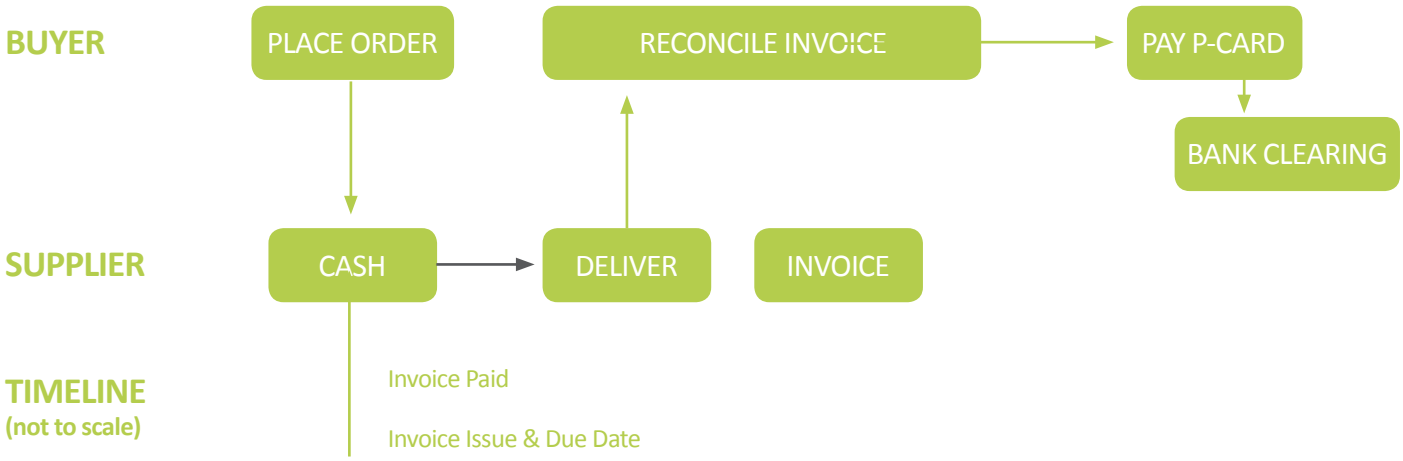
9. WIDER ECONOMIC BENEFITS OF E-INVOICING

9.1 P-CARDS FOR PERSONAL BUDGETS

Purchasing cards (P-cards) offer a payment method for sundry purchases or other expenses such as travel and expenses. This eliminates issues such as failure to raise POs and is primarily for high-volume, low-value purchases. However, it can increase the cost of processing invoices due to the need for reconciliation.

Company cards, otherwise known as commercial cards, are in use among 57% of respondents. However, most use them solely for travel and expenses. Organisations that use them as a true P-card may find that without proper control, the use of P-cards can become unwieldy.

P-Card Cash Cycle



For P-card purchases, the supplier agrees to be paid via a payment card and cover the resulting merchant fees (1.8%). This is a benefit to the supplier in that the cash is paid before goods are shipped. However, the buyer faces complications around orders to multiple suppliers and reconciliation of payments to invoices.

9. WIDER ECONOMIC BENEFITS OF E-INVOICING

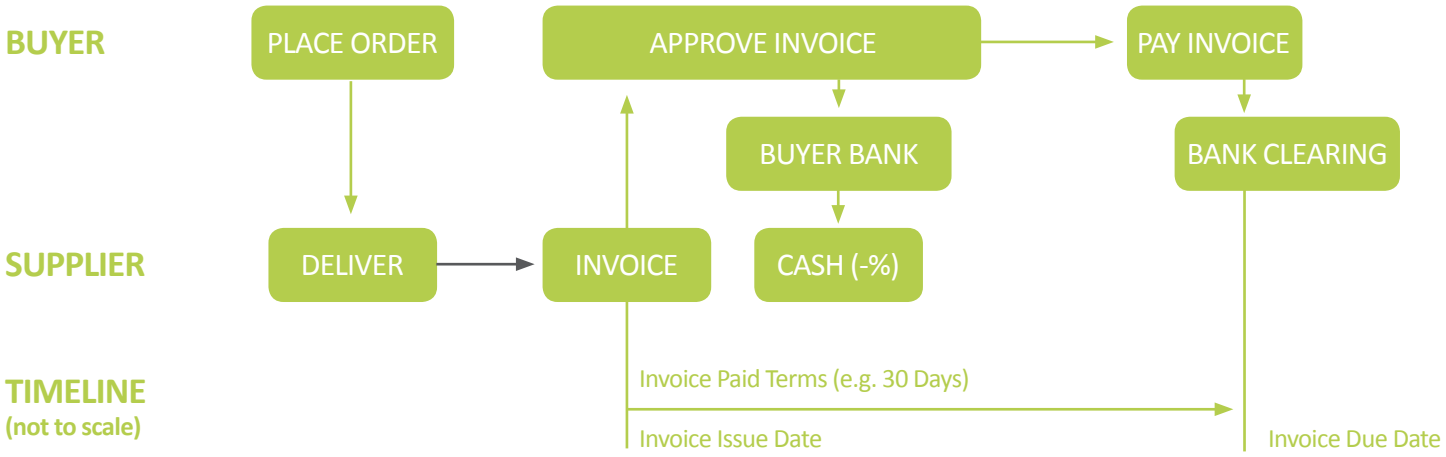
9.2 REVERSE FACTORING (SCF)

Traditional Supply Chain Financing (SCF) or Reverse Factoring provides short-term credit by linking the buyer and seller with a financing institution, typically a bank. SCF solutions require an approved invoice from the buyer, a supplier portal, and for the supplier to hold an account with the financing institution.

Instead of using its own cash to pay the supplier early, the buyer's bank advances the cash to the supplier on the strength of the invoice that has been issued and approved. When the invoice becomes due, the buyer pays the bank rather than the supplier. The supplier pays a fee to the bank for the privilege of getting cash into their account quickly. The fee for the early payment is based on the risk profile of the buyer.

For small suppliers with a large buyer, such a fee can be lower than interest on a working capital facility with their own bank at a rate based on their own risk profile. Additionally, creditworthy buying organisations can benefit from the option to negotiate extended payment terms, thereby conserving cash. This process can even be more efficient and the payment more prompt if SCF is integrated with e-Invoicing.

Reverse Factoring



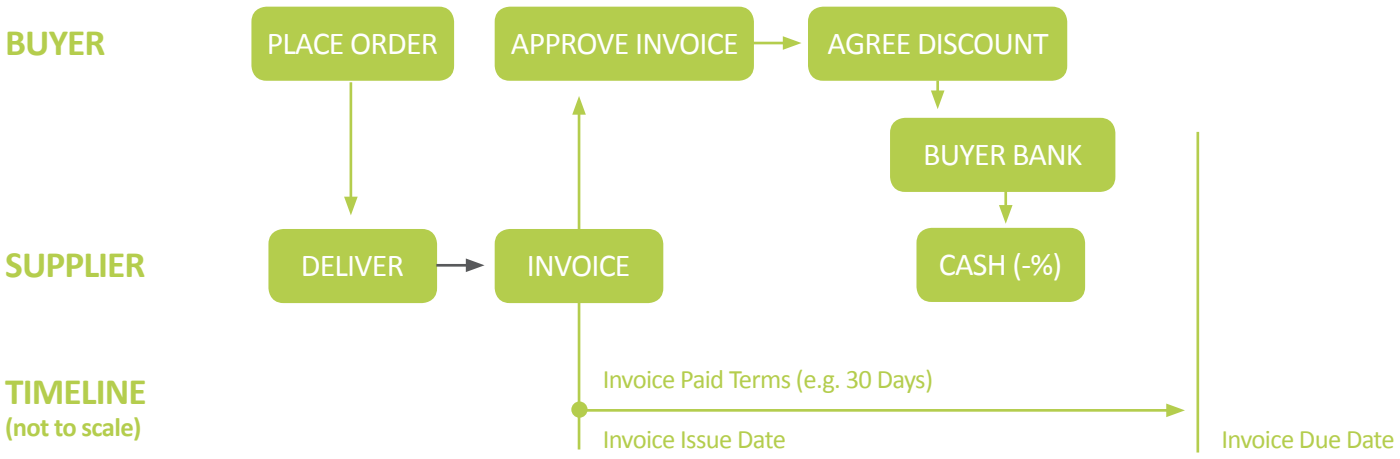
9. WIDER ECONOMIC BENEFITS OF E-INVOICING

9.3 DYNAMIC DISCOUNTING SOLUTIONS

Dynamic discounting allows the buyer to offer the supplier early payment in return for a discount. This enables the buyer to make a saving against the supplier invoice. For example, an invoice for £2,000 is approved for payment within three days of receipt. The buyer offers the supplier early payment in exchange for a 2% discount (£40). In the case of a fixed discount, the discount only applies when the invoice is paid within a fixed term (e.g. 10 days). If the payment is made before payment term but after the discount term then no discount is received. With dynamic discounting, a discount will apply as long as payment is made before payment term. The discount declines as it nears the actual payment term.

If the supplier uses e-Invoicing, the invoice can be quickly approved, leading to an earlier payment and higher discount, and supporting the Prompt Payment Code. The buyer receives the discount, thereby lowering costs, with an immediate impact on the company's bottom line.

Dynamic Discounting



9. WIDER ECONOMIC BENEFITS OF E-INVOICING

9.4 OTHER PAYMENT METHODS ARE COMING ONTO THE MARKET

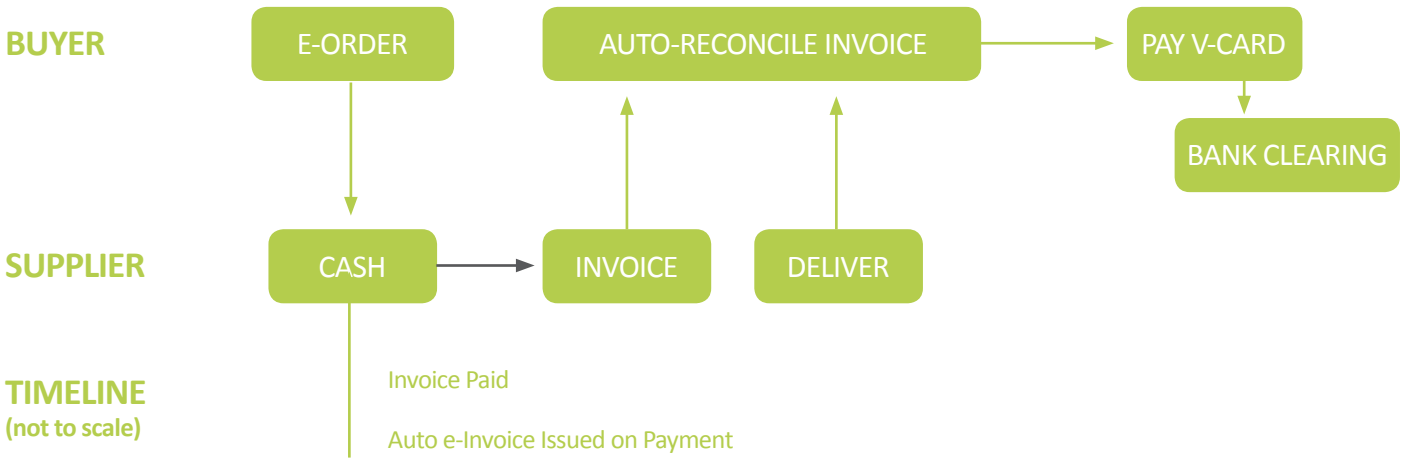
Other automated solutions around orders and approved invoices are entering the market and are an extension of the concepts outlined above.

9.4.1 Order e-Payment

The e-Payment solution is based on the concept of a P-card. However, this is no longer a physical card with no card number requiring input. It is based on the latest virtual card technology which automatically generates a virtual card number that can only be used for that specific payment.

The supplier is paid via a virtual card on order against an agreed service or product from an online catalogue with fixed prices. The buyer pays the full amount and, as with P-cards, the supplier pays the merchant fees. Auto-invoicing is used to close the loop. Payment is made immediately upon receiving the invoice, based on the original approval against the purchase order. No human interaction is required unless there is a delivery issue. The supplier receives an early payment with proper reconciliation data. The buyer benefits from a fully automated service and, depending on the agreement with its bank, can repay the bank later thus extending their outstanding payments. Finally, subject to the buyer's agreement with their bank, a rebate may be offered against each payment.

E-Order Payment



This level of automation increases the controls around spend and results in a touchless invoice. By purchasing common and repetitive goods from catalogues, overall costs are organically reduced through competitive market forces.

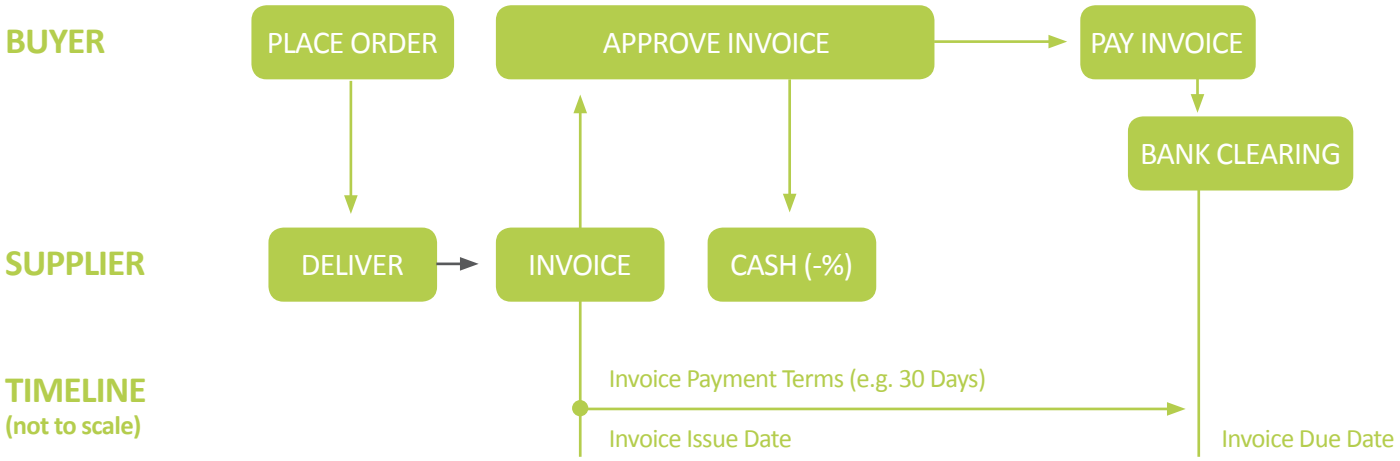
9. WIDER ECONOMIC BENEFITS OF E-INVOICING

9.4 OTHER PAYMENT METHODS ARE COMING ONTO THE MARKET

9.4.2 Invoice e-Payment

This works in a similar fashion as the e-Order payment through a virtual card transaction. In this instance, the payment is made upon invoice approval while for e-Orders, the payment is made upon receipt of the invoice based on PO approval. The buyer pays the full amount and, as with P-cards, the supplier pays the merchant fees. No interaction is required by the buyer. Approval workflow is important to ensure rapid payments. The supplier receives an early payment with proper reconciliation data. The buyer benefits from a fully automated service and, depending on the agreement with its bank, can repay later, thereby extending its outstanding payments. Subject to the buyer's agreement with the bank, a rebate may be offered against each payment made this way.

Invoice E-Payment



Again, to maximise the benefits of this type of e-payment, the supplier needs to provide good quality invoice content that matches the order. The supplier could have funds in their account within two days of the invoice date, without any incremental cost to the buyer.

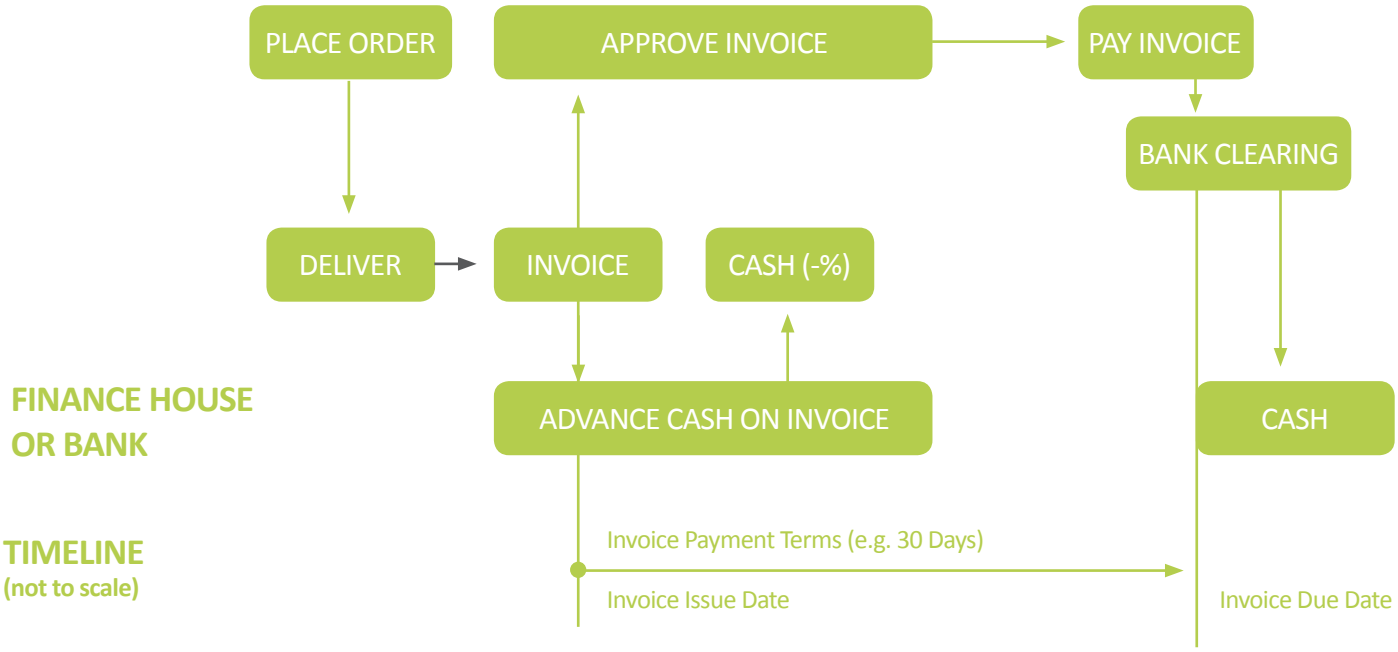
9. WIDER ECONOMIC BENEFITS OF E-INVOICING

9.4 OTHER PAYMENT METHODS ARE COMING ONTO THE MARKET

9.4.3 Supplier Invoice Financing

With this model, the supplier can use the value of an invoice to obtain finance, whether through traditional factoring or new, invoice-based financing. With factoring, the supplier sells its invoices to the financier (or factoring company). Generally the supplier will receive 65 – 80% of the invoice value. Invoice-based financing enables a supplier to obtain financing against an invoice while retaining ownership of the invoice. An advance of >80% of the invoice value can be achieved. This allows the supplier to unlock cash within the sales ledger to support growth or manage cash flow. The level of interest or amount per invoice depends on a number of elements including buyer liquidity, making invoice financing against public sector invoices very attractive to all parties.

Invoice Financing

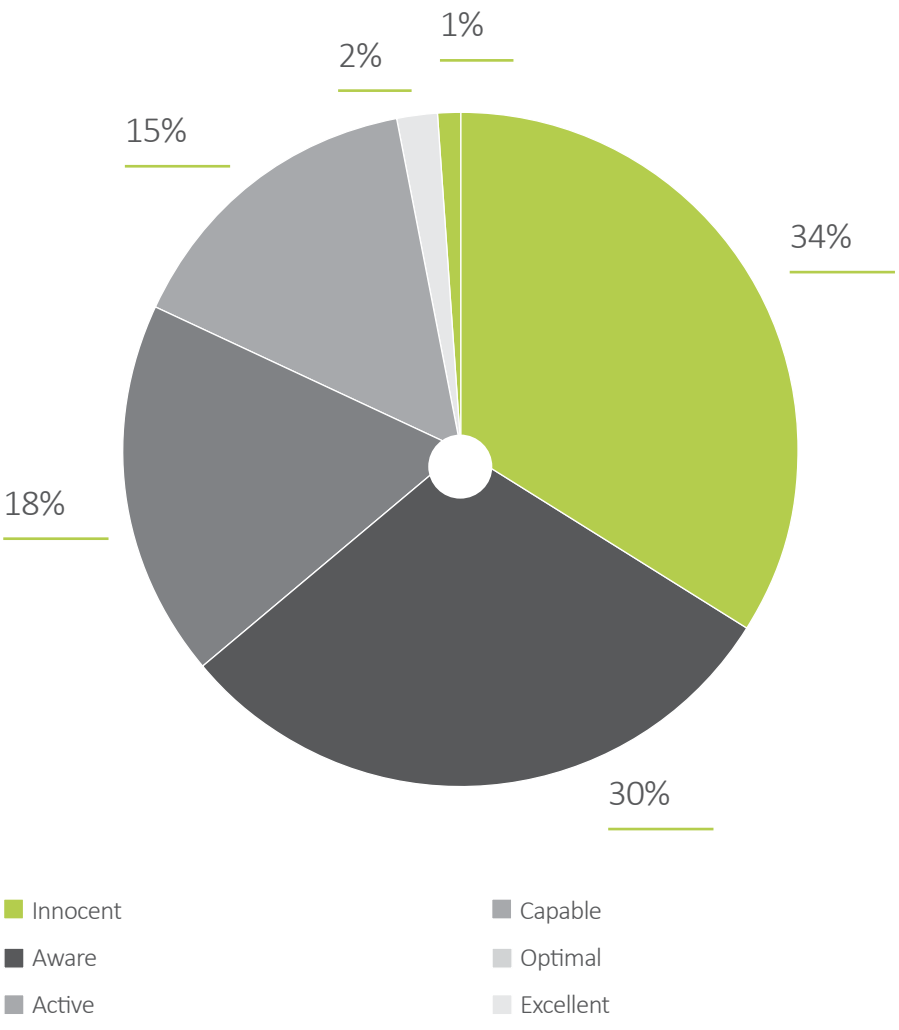


An e-Invoicing system can feed data directly to the financier and its risk and pricing engine. As such, the process becomes more flexible, more automated and can enable a faster response to the financing request. Although the supplier–buyer relationship is a key component of the risk assessment, it is based on the risk profile of the supplier rather than of the buyer (as with SCF).

10. ORGANISATIONAL E-INVOICE BENCHMARK

To help organisations identify the potential savings and next steps, some form of measurement is required. Therefore, this report has mapped the iGov 2015 survey respondents into an e-Invoicing benchmark scale, from 'Innocent' to 'Excellent'. This is based on an organisation's true e-Invoicing capabilities and its ability to support true e-Invoicing via CEN PC/434.

Maturity Levels Based on iGov 2015 Survey



iGov 2015 Survey: Organisational maturity based on processes and technology

10. ORGANISATIONAL E-INVOICE BENCHMARK

The outlook from the survey is positive, with 66% of respondents already on the journey to excellence and 1% having already achieved excellence. To determine an organisation's position on the maturity scale, the following definitions apply:

10.1 INNOCENT

The organisation has made no steps towards e-Invoicing or invoice automation. Processes are still based on paper invoices or purchase orders. Where PDF invoices are accepted, these are printed and processed manually. The organisation's susceptibility to cyber-crime is very high. Very high levels of savings are possible.

10.2 AWARE

Some basic actions have been taken to address the symptoms but not around e-Invoicing itself. Typically, only scanning and/or OCR has been adopted. Where PDF invoices are accepted, these are printed and scanned. In addition, there are manual or limited workflows downstream and few controls around POs. No business control layer exists. The organisation's vulnerability to cyber-crime is very high. High levels of savings are achievable.

10.3 ACTIVE

The organisation is starting to realise the benefits of e-Invoicing through some levels of automation. It still needs to address cultural or process issues such as PO compliance, and is focusing on the symptoms rather than root causes of process inefficiency. Typically, a number of disparate solutions are in place, with semi-automated processes plugging the gaps (e.g. printing and scanning PDF invoices or creating POs after manually approving an invoice). No business control layer exists outside the manual process. Good levels of savings are possible but the organisational risk of cyber-crime is very high.

10. ORGANISATIONAL E-INVOICE BENCHMARK

10.4 CAPABLE

These organisations have addressed the root issues of paper, and process the majority of invoices via workflow. However, there is still some paper within the process, leaving room for improvement. Additional investment will be required to enable structured e-Invoices to flow through the same process. The return on existing investment needs to be considered before moving forwards. At this level, the culture has changed, but due to the technical approach taken to date, the next step is challenging without some consolidation or internal mandate, such as "No PO, no Pay". No business control layer exists that supports all invoicing methods. Although medium levels of savings are possible, these are still worth pursuing. The organisational risk of cyber-crime needs to be weighed and the solutions in place evaluated.

10.5 OPTIMISED

No paper exists within any of the organisation's core processes. There are still some aspects that could be improved, for example full PO compliance or structured invoice receipt. Adding structured e-Invoices will require technology updates but the process could support these seamlessly. Although a business control layer may exist, it will need to be extended to support structured e-Invoicing. Culturally, the organisation is ready to become excellent, but building the business case is harder due to the current levels of automation. The organisational risk to cyber-crime needs to be weighed and the solutions in place evaluated.

10.6 EXCELLENT

The organisation has achieved a high level of automation and almost all the benefits of e-Invoicing have been realised. Support for structured e-Invoices is in place. There is little value in further investment. However, the organisational risk to cyber-crime need to be weighed and the solutions in place evaluated.

10. ORGANISATIONAL E-INVOICE BENCHMARK

10.7 WHAT IS E-INVOICING EXCELLENCE?

This report defines e-Invoicing Excellence in terms of an organisation with extremely high levels of invoice automation, very low invoice processing costs, straight-through touchless processes and the ability to pay all suppliers early (and thereby capture further savings or release capital into the economy). This can only be achieved though 100% e-Invoicing across the whole organisation and the ability to support all supplier types within the process.

10.8 WHAT COULD E-INVOICING EXCELLENCE LOOK LIKE?

The following lists provides an example of what could be achieved today with the support of e-Invoicing:

Invoice Automation

- No paper exists within the internal invoice or order process
- All spend is controlled and visible regardless of source
- Exceptions are limited to error correction or amendments
- All approvals are online, tracked and auditable
- Duplicate invoices are trapped and removed at source and suppliers notified of these errors
- Purchase Orders are never created retrospectively
- Invoices requiring a Purchase Order are never accepted from a supplier
- Perfect invoices are touchless from submission to payment
- Suppliers have visibility of invoice status regardless of submission method
- All fraud risks are addressed through 100% visibility, tracking and auditing
- No minimum invoice approval limits exist
- All supplier and inter-organisational interaction should be tracked and auditable
- All accepted invoices could be approved within five working days

10. ORGANISATIONAL E-INVOICE BENCHMARK

10.8 WHAT COULD E-INVOICING EXCELLENCE LOOK LIKE?

Automated Payments

- Invoices could be paid on approval via automated purchasing cards (P-cards)
- Orders against supplier punch-out catalogues are fully automated and touchless
- Catalogue orders can be paid via automated P-cards
- Manual P-card spend is limited to sundry items, not used to bypass payment controls
- Maximum P-card rebates are achieved
- Early payment discounts are captured from suppliers (when offered)

Invoice Exchange

- All inter-government invoice transactions are electronic
- All services bills to business consumers are electronic
- All POs are sent to suppliers electronically

11. THE BUSINESS CASE

The main benefit of moving to e-Invoicing is the potential cost savings, which will form the basis of any business case. The level of possible savings will depend on the organisation's current e-Invoice benchmark status and their internal culture.

11.1 COST PER INVOICE

The simplest business case can be developed using an organisation's total invoice volume:

Cost of Current Process

[Total Invoices] x [paper invoice cost] = [business case cost]

Possible Saving

[Total Invoices] x [possible saving per invoice] = [business case saving]

The table below can be used to quickly identify the possible 66% saving based on the benchmarking level identified earlier and the estimated 66% savings that could be possible:

BENCHMARK LEVEL	COSTS SOURCE	PAPER INVOICE COST	E-INVOICE COST	POSSIBLE SAVING PER E-INVOICE*
Optimised	CIPFA 2015 Lowest	£2.73	£0.93	**£1.80**
Active/Capable	iGov 2015 Average	£4.54	£1.55	**£2.99**
Aware/Active	CIPFA 2015 Average	£7.21	£2.46	**£4.75**
Innocent/Aware	CIPFA 2015 Highest	£14.41	£4.91	**£9.50**

* This saving excludes any costs relating to the e-Invoicing service

11. THE BUSINESS CASE

11.2 FACTORING IN SUPPLIER ADOPTION

When considering the business case, it is important to take into account the supplier e-Invoice adoption rate. Based on the assumption that adoption will grow at 40% per year and that 20% will remain on paper after two years, the possible savings look more realistic.

11.2.1 Total Savings - 40% Adoption at the end of Year One

BENCHMARK LEVEL	SAVING PER INVOICE	4,500 INVOICES	12,000 INVOICES	25,000 INVOICES	40,000 INVOICES	90,000 INVOICES
Optimised	£1.80	£1,417	£3,780	£7,875	£12,600	£28,350
Active/ Capable	£2.99	£2,354	£6,279	£13,081	£20,930	£47,092
Aware/Active	£4.75	£3,740	£9,975	£20,781	£33,250	£74,812
Innocent/ Aware	£9.50	£7,481	£19,950	£41,562	£66,500	£149,625

11.2.2 Total Savings – 80% Adoption at the end of Year Two

BENCHMARK LEVEL	SAVING PER INVOICE	4,500 INVOICES	12,000 INVOICES	25,000 INVOICES	40,000 INVOICES	90,000 INVOICES
Optimised	£1.80	£5,265	£14,040	£29,250	£ 46,800	£105,300
Active/ Capable	£2.99	£8,745	£23,322	£48,587	£ 77,740	£174,915
Aware/Active	£4.75	£13,893	£37,050	£77,187	£123,500	£277,875
Innocent/ Aware	£9.50	£27,787	£74,100	£154,375	£247,000	£555,750

12. MAKING E-INVOICING HAPPEN

The final step is to put e-Invoicing in place to reap the rewards. To that end, the cost of any solution needs to be balanced against the potential savings to determine the validity of the business case. The organisation's current maturity will dictate the solutions and services needed. Finally, there needs to be top-down buy-in to both the importance of e-Invoicing and its practical implementation.

12.1 MOVING FROM INNOCENT – HIGH SAVING LEVELS POSSIBLE

This organisation has yet to take the first step towards e-Invoicing and still relies on paper invoices and POs. Therefore, the opportunity exists to leapfrog directly to 'Optimal' or 'Excellent' rather than incremental improvements. This can be achieved by selecting the right off-the-shelf e-Invoicing solution while also focusing on the cultural aspects of iGovernment. To get to an optimal state, it is important to ensure that:

- PO-matching/buyer budgeting is in place or in progress
- Invoice approval workflows are adequate to support the current processes
- The solution supports 100% electronic processes internally

The following cost and efficiency savings should be achievable:

Process Steps	1. Capture or Receive	2. Enter & Codification	3. Validation & Matching	4. Dispute Management	5. Payment & Cash Management	6. Archiving	Total
Effort	6%	17%	23%	14%	27%	13%	100%
Cost	£0.90	£2.46	£3.26	£2.05	£3.93	£1.80	£14.41
Effort	0%	0%	20%	33%	33%	13%	100%
Cost	£0.00	£0.00	£0.98	£1.64	£1.64	£0.66	£4.91
						Saving	£9.50

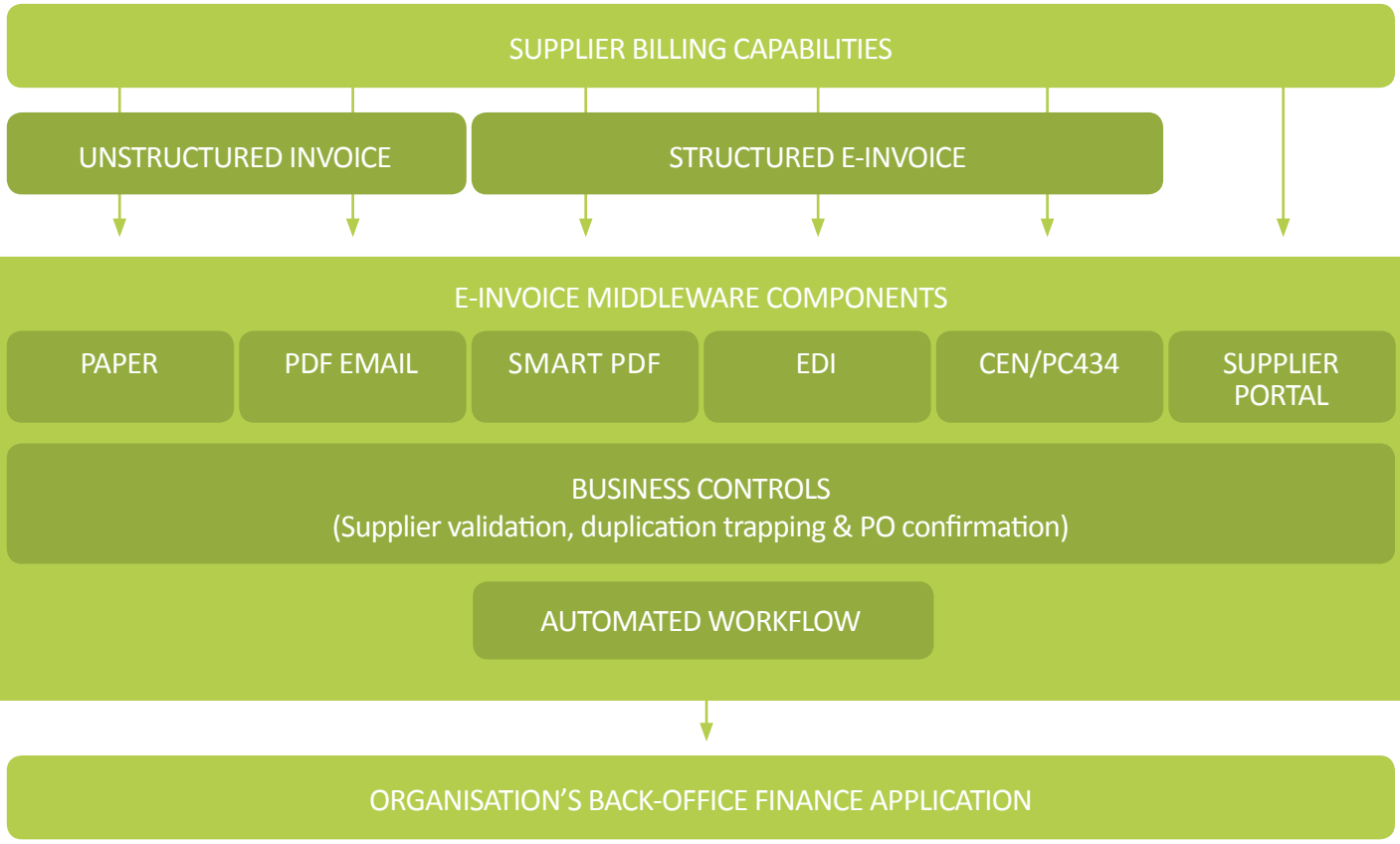
12. MAKING E-INVOICING HAPPEN

12.1 MOVING FROM INNOCENT – HIGH SAVING LEVELS POSSIBLE

An excellent process allows high quality, PO-based invoices to flow touchlessly from the supplier into the back-office. This could also be extended to automatic payment on approved invoice. Other features such as PO-flipping and auto-invoicing allow the PO process to be further automated.

The net result of automating the approval and matching process is far greater visibility into the process and total auditability. Being able to spot the bottlenecks within a process, and quantify the end-to-end lapsed time and effort, enables further costs savings to be achieved without new investment. Fraud risk is reduced to a minimal level as there are controls at every stage.

The best approach is to consider a middleware layer that connects to existing back-office processes and supports the whole range of e-Invoicing services available.



12. MAKING E-INVOICING HAPPEN

12.2 MOVING FROM AWARE – MEDIUM SAVING LEVELS POSSIBLE

The switch from 'Aware' to 'Optimal' will introduce realistic levels of saving. The reuse of existing technology needs to be carefully considered. Additional savings could be made if the costs were linked to the extension of existing scanning or OCR technology. However, it may be time to switch to newer technology and halt current investment, in which case the cost savings will still apply but the implementation approach will be that of an 'Innocent' organisation.

If existing technology is to be used, the next step must be to harmonise the internal invoice process to ensure that any new invoicing method does not require future IT resource. Implementing an approval workflow and automated matching solution would enable the move to an 'Active' or 'Capable' status.

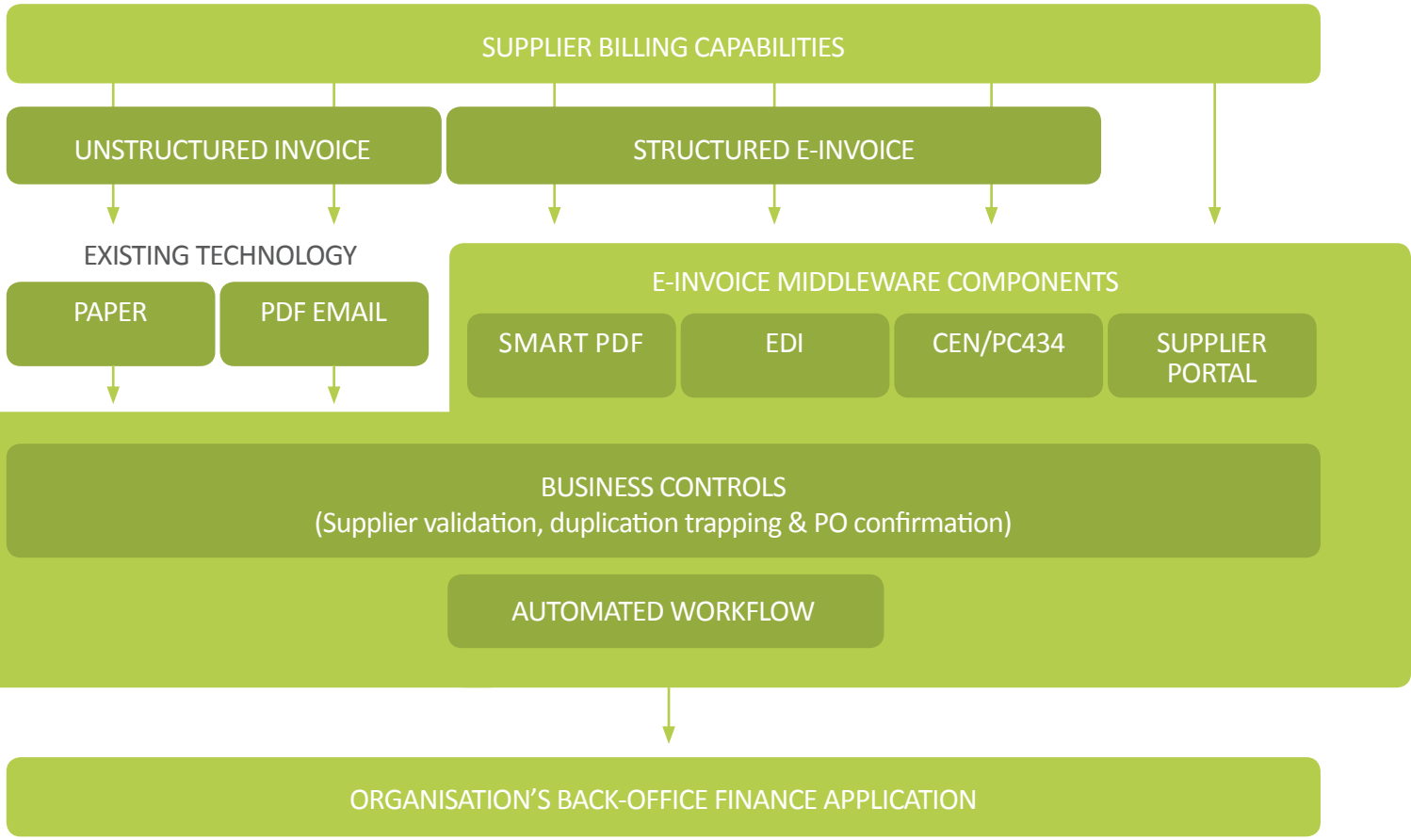
Process Steps	1. Capture or Receive	2. Enter & Codification	3. Validation & Matching	4. Dispute Management	5. Payment & Cash Management	6. Archiving	Total
Effort	6%	17%	23%	14%	27%	13%	100%
Cost	£0.45	£1.23	£1.64	£1.02	£1.97	£0.90	£7.21
Effort	0%	0%	20%	33%	33%	13%	100%
Cost	£0.00	£0.00	£0.49	£0.82	£0.82	£0.33	£2.46
						Saving	£4.75

12. MAKING E-INVOICING HAPPEN

12.2 MOVING FROM AWARE – MEDIUM SAVING LEVELS POSSIBLE

The business case is similar to that for 'Innocent' organisations, but with careful reuse of any prior IT investment, especially if existing solutions are to be kept in place. Fraud risk can be reduced by the elimination of PDF email processes and by validating the authenticity of the supplier and invoice content.

The best approach is to consider a middleware layer that supports existing back-office processes. For the solution to add maximum value, business control and approval layers are prerequisites. If possible, any existing scanning technology should be incorporated into the solution.



12. MAKING E-INVOICING HAPPEN

12.3 ACTIVE OR CAPABLE – LOW SAVING LEVELS POSSIBLE

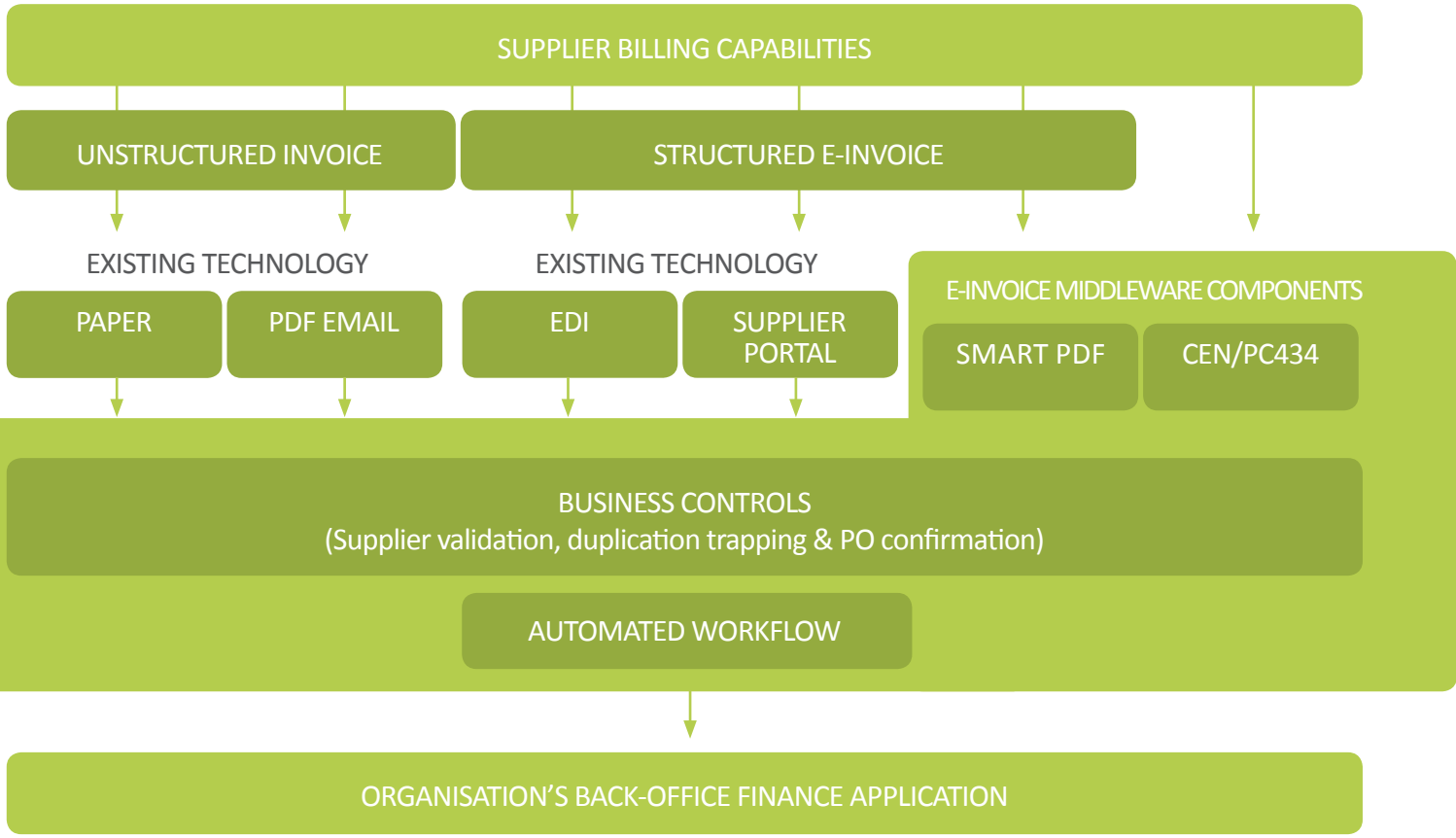
The business case in this instance needs to focus on adding the right level of technology to support more extensive use of e-Invoicing. The reuse of existing technology should be considered, as additional savings could be obtained if existing scanning or OCR technologies were replaced with a lower cost solution. However, this may require more operational change than the savings justify. The focus should be on further process improvement, enabling more suppliers to connect and supporting prompt payment financing.

Process Steps	1. Capture or Receive	2. Enter & Codification	3. Validation & Matching	4. Dispute Management	5. Payment & Cash Management	6. Archiving	Total
Effort	6%	17%	23%	14%	27%	13%	100%
Cost	£0.28	£0.77	£1.03	£0.64	£1.24	£0.57	£4.54
Effort	0%	0%	20%	33%	33%	13%	100%
Cost	£0.00	£0.00	£0.31	£0.52	£0.52	£0.21	£1.55
						Saving	£2.99

12. MAKING E-INVOICING HAPPEN

12.3 ACTIVE OR CAPABLE – LOW SAVING LEVELS POSSIBLE

The organisation will need to look at how best to support the new e-Invoicing standards (CEN PC/434) and should also look at working with structured PDF invoices as a way of further automating the process. This will need to be in conjunction with the existing invoice process, either via a plug-and-play solution or by upgrading an existing investment. However, careful consideration is needed to identify suppliers and eliminate duplicate invoices.



12. MAKING E-INVOICING HAPPEN

12.4 OPTIMAL TO EXCELLENT – LOWEST SAVING LEVELS POSSIBLE

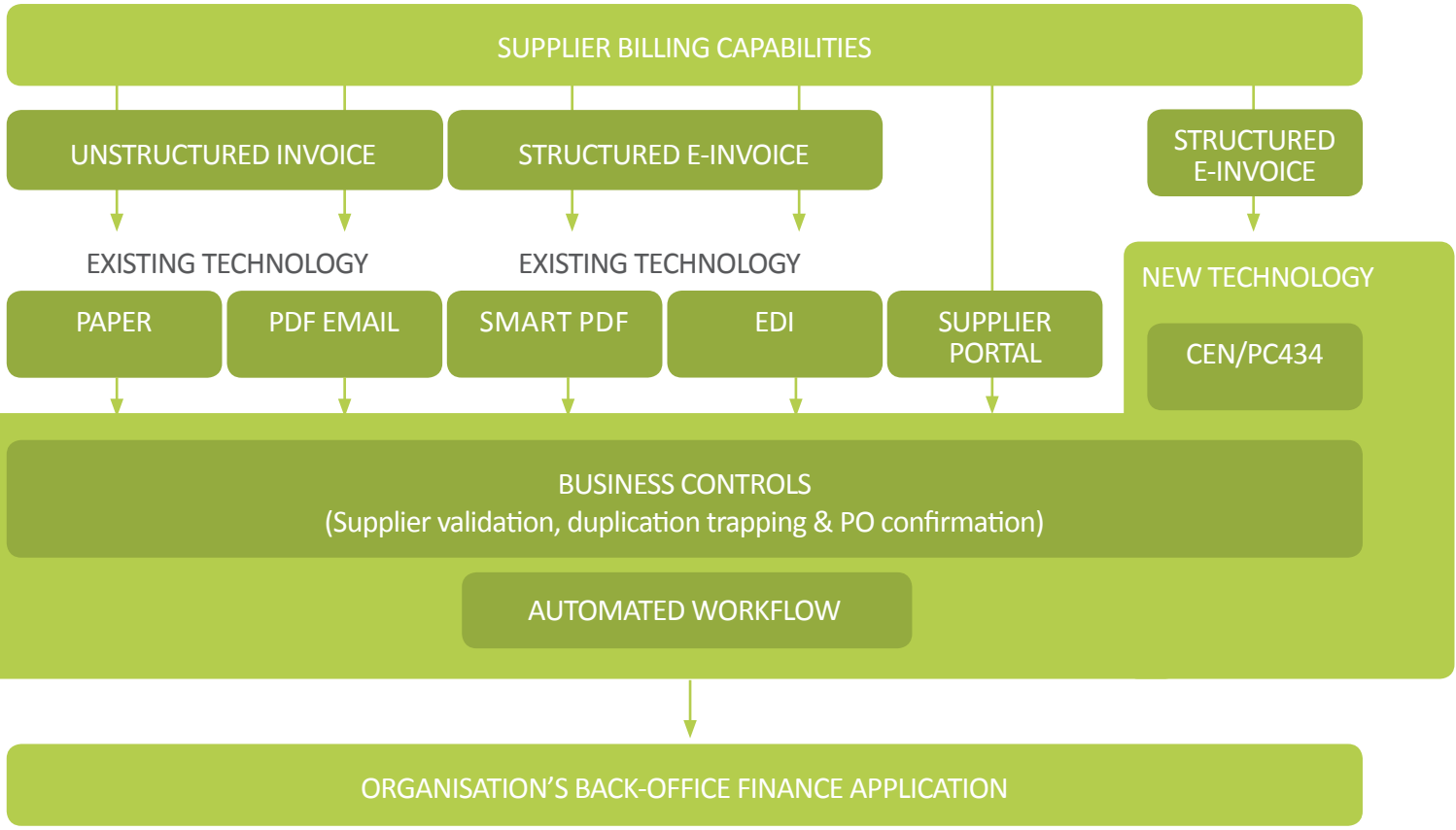
The business case here is less compelling, but residual levels of savings could still be expected, subject to the level of the existing investments and savings already achieved. The focus should be on further process improvement, enabling more supplier automation and prompt payment financing.

Process Steps	1. Capture or Receive	2. Enter & Codification	3. Validation & Matching	4. Dispute Management	5. Payment & Cash Management	6. Archiving	Total
Effort	6%	17%	23%	14%	27%	13%	100%
Cost	£0.17	£0.47	£0.62	£0.39	£0.74	£0.34	£2.73
Effort	0%	0%	20%	33%	33%	13%	100%
Cost	£0.00	£0.00	£0.19	£0.31	£0.31	£0.12	£0.93
						Saving	£1.80

12. MAKING E-INVOICING HAPPEN

12.4 OPTIMAL TO EXCELLENT – LOWEST SAVING LEVELS POSSIBLE

Ultimately, the organisation will need to look at how best to support the new e-Invoicing standards (CEN/PC434) in conjunction with the existing invoice automation process. This could be via a plug-and-play solution or upgrading an existing investment. However, careful consideration is needed to identify suppliers and eliminate duplicate invoices.



12. MAKING E-INVOICING HAPPEN

12.5 SUMMARY

The benefits of moving to e-Invoicing are compelling, especially when measured against paper processes. While the financial business case needs to be justified, the underlying benefits and drivers go beyond cost savings alone. As well as reducing waste and inefficiency, the transformation should support error and fraud reduction through automation.

The switch to e-Invoicing need not be as disruptive as many organisations anticipate, and the ability to select the right type of service through the G-Cloud framework makes the process more straightforward. However, the consideration of the internal cultural shift required to adopt digital services should not be overlooked.

It is clear that the e-Invoicing movement is gathering momentum and the adoption of e-Invoicing by forward-thinking Public Sector bodies across Europe will further accelerate change. In the path of this unstoppable revolution, organisations that lack a clear plan and postpone transformation will face greater upheaval than those that start preparations for Making e-Invoicing Happen today.

Appendix A

Legislative Environment

13. APPENDIX A LEGISLATIVE ENVIRONMENT

13.1 EUROPEAN DEFINITION OF E-INVOICING

European Directive 2014/55/EU provides a clear definition of an electronic invoice:

"Article 2 Definitions: For the purposes of this Directive, the following definitions shall apply: (1) 'electronic invoice' means an invoice that has been issued, transmitted and received in a structured electronic format which allows for its automatic and electronic processing."

It is important that e-Invoicing be defined as a method used by trading partners to pass financial documents between one another – not simply the transmission of the invoice in electronic form. Part of the 2014/55/EU directive was the creation of a common European e-Invoicing standard: CEN/PC 434. This standard will be available for use mid-2017 and will cover a number of XML-based schemas. Notably, all Public Sector bodies, including small contracting authorities, will be required to support the new CEN/PC 434 standards by 27th November 2019.

However, as the iGov survey shows, e-Invoicing alone cannot address the root causes of high invoice processing costs (although without it, the optimal level of cost saving can never be achieved). e-Invoicing is merely an enabler of change: only when supported by a shift in organisational culture to smarter digital ways of working can the full benefits and efficiencies be realised.

Please note that this report focuses on the benefits of e-Invoicing across the whole process and how it can reduce processing costs, strengthen the economy and improve spend management.

13. APPENDIX A LEGISLATIVE ENVIRONMENT

13.2 EUROPEAN DIGITAL AGENDA 2020

The European Union and Member States have taken a number of steps to promote e-Invoicing in support of the 2020 Digital Agenda. Relevant EU measures and policy declarations have included:

- The VAT Directive 2010/45/EC placing e-Invoicing on an equal footing with paper invoicing
- The Commission communication "Reaping the benefits of electronic invoicing for Europe" COM (2010) 712
- The Commission communication "End-to-end e-Procurement to modernise public administration" COM (2013)453 Final
- Resolutions and supporting decisions of the European Parliament and Council
- The Directive 2014/55/EU on e-Invoicing in public procurement

Readers are referred to these documents, and in particular to the preface to the 2014/55/EU Directive, for a full background to the EU-encouraged move to e-Invoicing, which demonstrates clear public policy support at EU and Member State level.

In the coming years, all EU public bodies will be expected to implement the provisions of Directive 2014/55/EU requiring them to adopt e-Invoicing, based on a standard for a core European invoice. Members States are therefore obliged to create a national policy framework, consistent with the European framework, to set out the implementation of e-Invoicing in the national context

13.3 SMALL BUSINESS, ENTERPRISE & EMPLOYMENT (SBEE) ACT

The UK has supported and reinforced the values of the digital agenda through changes to the VAT regulations (1st January 2013) and adoption of public sector procurement and e-Invoicing. In March 2015, the Small Business, Enterprise & Employment (SBEE) Act – making provision for improved access to finance for businesses and individuals – gained royal assent. This Act gives, inter alia, power to regulate in the area of e-Invoicing and these regulations are pending at time of writing this report. They are expected to implement the Directive 2014/55/EU and therefore the adoption of e-Invoicing within the English public sector.

13. APPENDIX A LEGISLATIVE ENVIRONMENT

13.4 LATE PAYMENT DIRECTIVE

Late payment legislation has been in place since 1998 concerning the statutory right for small businesses to claim interest against the late payment of invoices for public sector. This made the UK among the first EU member states to implement late payment legislation. The prompt payment code has now made late payment, beyond 30 days, the exception rather than the rule within Local Government. The iGov survey shows that this this top down push to promote a culture of prompt settlement of supplier invoices has resulted in the adoption of invoice automation and e-Invoicing. In around 30% of cases, prompt payment has been supported through the adoption of paper scanning and automation tools.

Amended late payment legislation came into force on 16th March 2013 in England, this supported European Directive 2011/7/EU, which further combats late payment in commercial transactions within primary contractors to the public sector and their supply chains. The aims is to use the Public Sector as the catalyst to change the late payment culture and simplify the pursuit of interest claims.

13.5 CEN PC/434

Within the core European directive (2014/55/EU) is the creation of a common European structured e-Invoicing standard. The intention is that all Public Sector buyers will be able to receive e-Invoices in the standard from suppliers. This is spilt into two aspects: invoice content and invoice language.

The standard will outline the core invoice content required to support European-wide trade with suppliers. It will detail the required fields, including mandatory and country-optional fields. This semantic model will enable the machine readable e-Invoices in XML to be read across Europe.

To support the diverse nature of the supplier community, the standard PC/434 invoice content will be delivered in a number of languages or what is technically called a “syntax”. These syntax are commonly used industry based e-Invoice formats. The current PC/434 standard has identified 3 or 4 syntaxes that would need to be supported. English Public Sector bodies will be expected to support all syntaxes directly or via a service provider.

13. APPENDIX A LEGISLATIVE ENVIRONMENT

13.6 TIMETABLE FOR ADOPTION

The timeline for implementation will be a working draft of the standard invoice content by December 2015, with all the languages outlined by June 2016. The target is to have the standard in place by mid-2017.

The critical deadline outlined for support of CEN/PC 434 is 27th November 2019. This is for small contracting authorities. Large bodies and Government are expected to be live by November 2018. By this date all European Public Sector bodies must be able to accept e-Invoices that meet the CEN/PC434 standard, supported by true e-Invoicing capabilities. Some European countries (e.g. Italy, Spain, Finland and Norway) have already enacted mandatory e-Invoicing legislation.

13.7 EUROPEAN MULTI-STAKEHOLDER FORUM ON E-INVOICING (EMSFEI)

We would like to make reference again to the European Multi-Stakeholder Forum on e-Invoicing as an advisory body to the Commission on e-invoicing and refer you to its recent guidance paper for all public sector entities in Europe: The adoption of e-Invoicing in public procurement: Guidance for EU public administrations.

Appendix B

Glossary of Terms

14. APPENDIX B - GLOSSARY OF TERMS

14.1 Accounts Payable (AP)

The team and/or process within the buying organisation responsible for the collection and payment of supplier invoices.

14.2 Account Receivables (AR)

The team and/or process within the supplier organisation responsible creation and delivery of invoices. This can include the Credit Control function, although this tends to be a separate team.

14.3 Approver

This is either the Buyer or someone else who can accept that the invoice is correct and against real good or services that have been delivered correctly. Often this is done against a Goods Receipt Note.

14.4 Buyer

The person, department or organisation that ordered the goods or services from the suppliers. Sometimes this is someone in procurement, but more typically it's the person that raised the PO or instructed the supplier to deliver the goods or services. The Buyer often refers to the buying organisation rather than an individual.

14.5 Back-office Systems

The applications and/or systems used to manage information and processes within an organisations. This includes data storage, finance applications, security systems, manufacturing and delivery of services. Sometimes referred to as an Enterprise Resource Planning (ERP) or Finance application.

14.6 Cloud Technology

The cloud is a common term for outsourced IT solutions running in secure third-party environments, accessed via the Web or Internet. However, this is not always the case. The benefit of cloud technology is that the systems and services are maintained on behalf of the customer rather than internal IT. The downside is that configuration of the cloud service may be limited.

14.7 Credit Control

The team and/or process within a supplier responsible for the collection of payments from customers. This includes the use of documents such as statements, Dunning letters and credit notes.

14. APPENDIX B - GLOSSARY OF TERMS

14.8 Digital Signature

e-Invoices can be signed using an Advanced Electronic Signature which identifies the user, is unique to them, is under their sole control and is attached to the document in such a way that it becomes invalidated if the contents are changed. These signatures can be enhanced by the use of secure signature creation devices to become Qualified Electronic Signatures.

14.9 Dunning (chase) Letter

If a buying organisation is late in paying an invoice, the supplier's Credit Control team will start chasing payment. To this end, they send a scheduled series of Dunning Letters demanding payment. This is combined with statements to push the buyer into paying. Each letter is progressively strongly worded until court action is taken and the bad debt handed over to the legal team. In micro and small supplier organisations, this final step is costly and challenging.

14.10 EDI (Electronic Data Interchange)

This is the exchange of electronic documents via secure network connections. EDI covers the transmission of all the documents relating to the supply of goods or services. This includes purchases orders and invoices. EDI message structures are pre-agreed between the buyer and supplier.

14.11 ERP (Enterprise Resource Planning)

An ERP system typically offers an organisation computerised accounting and general ledger capabilities. These are used to manage budgets and enter invoices, and are linked to stock control and resource management processes to ensure efficient operation of the business. Common ERPs include SAP, Oracle, Microsoft Dynamics and Agresso.

14.12 Finance Application

A finance application offers an organisation computerised accounting and general ledger capabilities, and is used to manage budgets and enter invoices. Common finance applications are SAP, Oracle, Microsoft Dynamics, Sage and Agresso.

14.13 FTE (Full-time equivalent)

The simplest measure of cost reduction is based on the cost of staff or full-time equivalent (FTE). FTE is a unit that indicates the workload of an employed person in a way that makes workloads comparable. FTE is often used to measure a worker's involvement in a project, or to track cost reductions in an organisation. An FTE of 1.0 is equivalent to a full-time worker.

14. APPENDIX B - GLOSSARY OF TERMS

14.14 GRN (Goods Receipt Note)

Sometimes referred to as a Delivery Note by the supply organisation. The GRN is used by the buying organisation to demonstrate that the goods and services have been delivered as ordered.

14.15 ICT (Information and Communication Technology)

ICT is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications. This is managed and controlled by an ICT team focused on delivering the business requirements of the organisation.

14.16 Invoice (Purchase)

The purchase invoice is a request for payment by a supplier received by the buyer. The buyer will process and approve the invoice for payment. The purchase invoice can be received by buyer in three forms: paper, unstructured e-Invoice or structured e-Invoice.

14.17 Invoice (Sales)

The sales invoice or bill, is sent by the supplier to the buyer as a means to get paid for goods or services. The invoice lists the items delivered, dates of delivery and any VAT information linked to the transaction. This is created in the supplier's finance system and sent to the buyer via electronic data interchange (EDI), e-Invoice or on paper. HMRC provides a detailed list of the VAT requirements for an invoice content. Each invoice must be uniquely numbered to aid identification.

The invoice can be sent to the buyer in three forms: paper, unstructured e-Invoice or structured e-Invoice.

14.18 Invoice Key-in

The approved invoice is manually keyed into the finance system by an AP team member and matched against goods receipt notices (GRNs) and the PO.

14.19 No PO, No Pay

This is a simple protocol for ensuring suppliers always submit invoices with a PO number. Without a PO, the invoice is rejected and not processed. Some e-Invoicing solutions can be configured not to accept an invoice into the process without a PO number.

14. APPENDIX B - GLOSSARY OF TERMS

14.20 Optical Character Recognition (OCR)

A computer program that converts characters found in an image into binary values readable by a computer. For example the letter O is binary 1001111, whilst the number 0 is binary 0110000. The binary values are then sense-checked by the program to validate that it is an O rather than a 0. This is done by identifying the contents of an invoice; the OCR program will look for key binary structure of words, for example "Invoice Date:" and then validate that the characters that follow resemble a date (e.g. 10/10/2010). OCR technology is now very advanced but still requires a human to double-check any errors that may arise.

14.21 Outsourcing

This involves handing over a process element to a third-party organisation. For example 'Outsourced Scanning' is where the scanning and OCR element of the invoice process is done by a third party. The service offers a PO Box for the supplier invoices and simply sends the organisation the final invoice content and images. The benefit is that the Public Sector organisation only pays for the invoices processed and doesn't need to invest in scanning technology or the ongoing ownership costs.

14.22 Procurement

The procurement team and/or process sit within the buyer organisation and are responsible for the negotiation of contracts and pricing with suppliers. In some cases they are also in control the ordering of goods or services from suppliers.

14.23 PO Flip & Auto Invoicing

This allows for an invoice to be created directly from the PO, ensuring that the information provided by the Buyer on the PO is reflected by the supplier on the invoice. This removes core content errors and enables the supplier to create an invoice almost at the press of a button. The supplier still needs to create their own invoice for accounting and auditing proposes.

Auto Invoicing extends the process further by creating an invoice against a payment in the same way as a shopping receipt. The payment is triggered by the supplier shipping the goods or providing the services. If the goods or are services are not delivered, the Buyer demands a refund. Auto Invoicing is normally linked to e-Payments.

14. APPENDIX B - GLOSSARY OF TERMS

14.24 Portable Document Format (PDF)

The PDF was developed in the mid-90s by Adobe Corporation as a way of reliably displaying a fixed-layout document on a computer independently of application software, hardware or operating systems, which can then be printed by any Postscript-enabled device. Today, it is widely regarded as a digital alternative to paper documents. It is important to note that there are two type of PDF: structured and unstructured.

An unstructured PDF is in essence an image embedded within the PDF. This means that if a computer needs to read the contents, OCR technology is required. A structured PDF enables text analysis by the computer and presented to the reader as an image.

14.25 Purchase Order (PO)

The PO lists the quantities and prices of goods or services required from the supplier. It is created in the finance system and sent to the supplier via EDI, e-order or on paper. It details costs, volumes and delivery addresses but doesn't normally contain VAT information. The PO is uniquely numbered to enable matching against departments and budgets within the finance system.

The PO number ensures that the invoice can be processed and allocated to the correct cost centre or project. The PO can be sent to the supplier in three forms: paper, unstructured e-order or structured e-order.

14.26 Scanning

Paper invoices can be scanned by a device as they enter the company to create a digitised image can then be used by AP team members to confirm that goods or services have been delivered. When used in conjunction with OCR, the content can be recognised, avoiding the need for rekeying data.

14.27 Structured e-order

This PO is delivered to the supplier in a digital format that can be processed automatically by the supplier systems or viewed within an on-line internet page or portal. A structured e-order contains binary values for each character which are readable by a computer, eliminating the need for rekeying of the content, thereby reducing errors and duplications.

14.28 Structured e-Invoice

This type of invoice is delivered to the buyer in a digital format that can be processed automatically by the buyer's systems, or viewed through an online portal. A structured e-Invoice contains binary values for each character which are readable by a computer, eliminating the need for rekeying of the content, thereby reducing errors and duplications.

14. APPENDIX B - GLOSSARY OF TERMS

14.29 Supplier

Sometimes also referred to the Vendor or Seller, the supplier is the organisation that sells and delivers goods and/or services. The Supplier receives a PO and sends a Sales Invoices. The supplier is responsible for the creation of the invoice and its content, including VAT-compliant data. The supplier is paid by the buying organisation.

14.30 Unstructured e-order

This is a PO delivered to the supplier typically via email in an electronic format that cannot be processed automatically without being passed through an OCR program. The supplier can view the unstructured e-order online but requires either OCR or rekeying of the content into their sales order processing system. Rekeying introduces the risk of error and duplication.

14.31 Unstructured e-Invoice

This is an invoice delivered to the buyer typically via email in an electronic format that cannot be processed automatically without being passed through an OCR program. The buyer can view the unstructured e-Invoice online but requires either OCR or rekeying of the content into their AP system. Rekeying introduces the risk of error and duplication.

Appendix C

Reference Material & Acknowledgements

15 APPENDIX C – REFERENCE MATERIAL & ACKNOWLEDGE-MENTS

15.1 Acknowledgments

We wish to thank CIPFA and Billentis for access to their reports and data.

15.2 Reference Materials

15.2.1 Late Payment Code

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/360834/bis-14-1116-a-users-guide-to-the-recast-late-payment-directive.pdf

15.2.2 Small Business Enterprise and Employment Act

http://www.legislation.gov.uk/ukpga/2015/26/contents/enacted

15.2.3 European Directive 2014/55/EU

http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0055

15.2.4 End-to-end e-Procurement to modernise public administration

http://europa.eu/rapid/press-release_IP-13-608_en.htm

15.2.5 Reaping the benefits of electronic invoicing for Europe

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0712:FIN:en:PDF

15.2.6 Directive 2010/45/EC

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:189:0001:0008:EN:PDF

http://ec.europa.eu/taxation_customs/resources/documents/taxation/vat/traders/invoicing_rules/explanatory_notes_en.pdf

15.2.7 CEN PC 434

http://ec.europa.eu/growth/sectors/digital-economy/e-Invoicing/index_en.htm

15 APPENDIX C – REFERENCE MATERIAL & ACKNOWLEDGE-MENTS

15.2.8 iGov Survey 2015

http://www.basware.co.uk/knowledge-center/uk-public-sector-e-Invoicing-survey

15.2.9 Electronic Invoicing, the next steps towards digital government

http://www.basware.co.uk/knowledge-center/report-electronic-invoicing-the-next-steps-towards-digital-government

15.2.10 The Chartered Institute of Public Financing and Accounting (CIPFA)

http://www.cipfa.org/services/benchmarking/corporate-services/debtors

15.2.11 Billentis 2015

http://www.basware.co.uk/knowledge-center/e-billing-e-Invoicing-report-billentis

About the UK National e-Invoicing Forum

16. ABOUT THE UK NATIONAL E-INVOICING FORUM

16.1 HISTORY

The UK National e-Invoicing Forum (UKNeF) was established in 2010 as a self-funded initiative of industry associations, public sector bodies and solution providers to promote e-Invoicing in the UK public and private sectors. It also aims to ensure expert UK input to the EU Commission Multi-Stakeholder Forum on e-Invoicing, so that emerging EU policy – and its implementation – supports UK public and private interests.

16.2 MISSION

"To save the UK tax-payer money and improve service quality and transparency by replacing paper invoices with wholly electronic transactions."

16.3 ACTIVITIES

The UKNeF promotes the benefits of e-Invoicing to the UK Public Sector and the wider UK economy, meeting regularly at the Houses of Parliament and engaging with MPs and Cabinet Advisors. The UKNeF ensures that the United Kingdom is fully represented within the European multi-stakeholder forum and in this capacity represent:

- The United Kingdom's e-Invoicing service providers
- The United Kingdom's 4.9 million small and medium enterprises
- The United Kingdom's Public Sector

16.4 OBJECTIVES

Support for Government Policy Making: to engage with Crown Commercial Service and provide expert opinion on the implementation of electronic invoicing by the UK Public Sector as described in the Small Business Enterprise and Employment Act.

Awareness and Implementation Support for Buyers and Suppliers: to champion, promote and advocate widespread adoption of electronic invoicing within the context of growing supply chain automation and end-to-end electronic transactions between buyers and sellers of goods and services.

16. ABOUT THE UK NATIONAL E-INVOICING FORUM

16.5 CONTRIBUTORS

The following individuals and/or organisation contributed to this report:

- Ad Van der Poel, Clear Funding
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- Charles Bryant, European e-Invoice Service Providers Association (EESPA)
- Gary Benson, Tungsten Network
- Ian Burdon, Elcom
- Kerry Jones, Department of Business, Innovation and Skills (BIS)
- Ken Clark, OpenText
- Nigel Taylor, information-economy.co.uk
- Steve Graham, NHS England
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16. ABOUT THE UK NATIONAL E-INVOICING FORUM

16.6 ABOUT THE AUTHOR

Stephen Carter (@e-InvoiceExpert) has over thirty years' experience in the financial documents industry. He has seen the shift from mainframe to the cloud, from pre-printed paper to PDF and now electronic invoicing. In this time he has created award-winning solutions that enable companies from global giants to small businesses to become more automated, competitive and agile. With this first-hand experience in different industries and countries, Stephen has seen finance teams adopt new technologies to improve working practises. By working at the leading edge of his industry, alongside Public Sector bodies, Banks and other organisations, he knows the real opportunities offered by e-Invoicing. Stephen sits on the UKNeF and is Head of e-Invoicing at Basware UK Limited.

"This is the 21st Century, the age of the smartphone, touchless payments and the global economy. The individual has embraced this real-time and connected world, using technology to get the best price, save time and improve relationships. Yet, businesses and Governments are still dependent on the exchange of paper or paper-like invoices. In today's global economy, the competitive opportunity offered by sharing invoices electronically goes far beyond saving paper and reducing costs. It is an enabler for new global markets opportunities and unlocking working capital held with the invoice."

Stephen Carter

16.7 THE ADOPTION OF E-INVOICING IN PUBLIC PROCUREMENT

We would like to introduce a complimentary report to 'Making It Happen' written by the UKNeF: The adoption of e-Invoicing in public procurement: Guidance for EU public administrations. This document was prepared by an Activity Group of the European Multi-Stakeholder Forum on e-Invoicing (EMSFEI) focused on the adoption of e-Invoicing in public procurement and endorsed by the EMSFEI on 21 March 2016. It describes the key decisions, phases and critical elements of an e-Invoicing programme, including a step-by-step guide on how to implement it.

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