# Unlocking Growth:

# Frictionless Trade for SMEs Powered by E-Invoicing and AI

Sage

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# About this report

The report has been drafted in collaboration with leading global experts in digitisation, tax, and financial technology and takes account of the views of 9,000 SMEs (Small and Medium Enterprises) across the UK, Europe, and the US.

It is intended for MPs, government officials, accountants, business groups and SMEs - particularly those focused on digitisation, economic growth, and productivity.

The expert panel that shaped this report is united in their appreciation of the benefits of coordinated government action to accelerate the implementation of e-invoicing.

**Expert contributors:**

**Carmen Cicirello**, Lead Adviser, Electronic Invoicing and co-founder UK e-invoicing Advocacy Lab, European Commission

**Marcus Laube**, CEO, Billentis, Secretary General, GENA, a global e-invoicing trade association

**Jason Oxman**, President and CEO, Information Technology Industry Council (ITI), the leading global technology trade association

**Glenn Collins**, Head of Technical and Strategic Engagement, ACCA UK, a globally recognised professional accounting body

**Aaron Harris**, Chief Technical Officer of Sage, is the market leader for integrated accounting, payroll, and payment systems, supporting the ambition of the world's entrepreneurs

**Francisco Hortigüela**, President of AMETIC, the leading tech sector association in Spain

**Vincent Thiébaut MP**, French MP, Horizons & Indépendants Group, former Member of the Study Group on Digital Economy, French National Assembly

**Gregor Poynton MP**, Labour UK MP and member of the Business and Trade Select Committee

**Alexander Fischer**, IT Director, HAMMEL Recyclingtechnik. A leading international manufacturer of recycling technology based in Thuringia, Germany

**Sergio Coscolín**, IT Manager, Grupo CRISOL. Spain's first and largest wholesale group providing comprehensive services to the hospitality

Sage surveyed 9,000 SMEs (1-999 employees) and 2,250 accountants, bookkeepers, and compliance professionals across markets: Germany, France, Denmark, the UK, Ireland, Portugal, Spain, and the USA, throughout April 2025.

# Joint foreword

## The potential of e-invoicing

E-Invoicing, referred to by the renowned Billentis[1] report as the 'silent revolution', should be considered critical digital infrastructure that will be a cornerstone of changing the way businesses work in an age of AI.

It enables structured data to be shared in real-time from one business's accounting system into another and opens up opportunities for SMEs to automatically share the data with other parties, such as customers in their supply chain, banks to apply for finance or tax authorities for tax purposes.

Previous research by Sage has demonstrated that this shift could save small businesses in the EU up to €13,500 per year by reducing manual admin, equivalent to 5 hours and 40 minutes saved per week.

Designed in the right way, e-invoicing could eliminate the many hours wasted and the friction that currently hampers trade, slows payments, complicates customs processes, and burdens tax reporting. Without it, too many SMEs and accountants will continue to be held back by inefficiencies, unable to fully benefit from the digital economy.

E-Invoicing is an economy-wide productivity opportunity. Economic modelling has demonstrated that the widespread SME adoption of e-invoicing could boost EU labour productivity by up to 2.6% per year and reduce late payments by 20%, accelerating average invoice settlement times by four days.

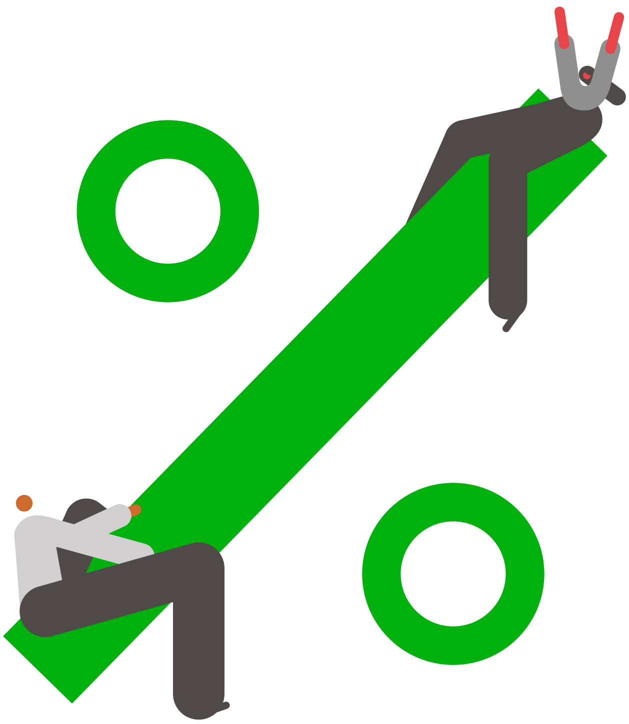
This report presents clear recommendations for government. Please see page 24 for a summary.

Governments can collaborate with accountants, the tech sector, and businesses to set a vision for integrated digital trade that accelerates widespread adoption of e-invoicing for faster payment, access to finance, automated tax compliance, supplier traceability, and reduced exposure to fraud.

By working with the tech sector and businesses, establishing the right standards will ensure the design of e-invoicing systems allows businesses to take advantage of the full benefits, especially the potential for integrated digital trade. This will then build the foundations of a more productive, transparent, and equitable economy.

**Signed by:**

*Marcus Laube*
*Jason Oxman*
*Glenn Collins*
*Alexander Fischer*
*Sergio Coscolín*
*Carmen Cicirello*
*Aaron Harris*
*Gregor Poynton, MP*



# Introduction: E-Invoicing, structured data and the link with AI

This report sets out the vision and recommendations for achieving integrated digital trade. It looks beyond the important initial phase of e-invoicing being mandated by governments globally, to a world where SMEs have fully automated workflows across trade, tax, and finance.

## E-Invoicing

Electronic invoicing (e-invoicing) is often misunderstood. It's not just digitising paper or sending PDFs via email. True e-invoicing means the automated generation, exchange, and processing of invoices in a structured, machine-readable format that enables data to flow seamlessly between systems, allowing invoices to be validated, matched, and paid without human intervention, reducing delay, error, and cost.

*“Imagine a world where business data is always current and reliable, and businesses don’t have to worry about closing the books. Unfortunately, businesses today are held back by cycles like the monthly close, the annual audit, and quarterly tax filing. These cycles take too much time and keep businesses focused on the past – not the future. E-Invoicing and integrated digital trade implemented in the right way could mean the general ledger is continuously synced up to the government, so businesses not only know how much tax they owe, but they also have real time, reliable view of business performance. The value to our customers of having way more confidence in the financials is game-changing.”*

**Aaron Harris**, CTO

*“The integration of AI into e-invoicing represents a significant step towards digital transformation. As AI evolves, it will continue to make processes more efficient, secure, and user-friendly.”*

**Marcus Laube**, CEO, Billentis

*“E-Invoicing should no longer be seen as just an upgrade to paper processes. It is critical infrastructure for a digital economy - the foundation that allows real-time data to flow between businesses, governments, and financial institutions. Without it, we remain stuck in fragmented, error-prone systems that slow us down.”*

**Marcus Laube**, CEO, Billentis

*“Electronic invoicing is much more than just an administrative formality - it can serve as the foundation on which SMEs build their digital transformation. By integrating e-invoicing into their processes, SMEs not only automate financial management but also unlock broader digitalisation opportunities that enhance operational efficiency, enable data-driven decision-making, and strengthen their competitiveness in an increasingly digital and globalised market.”*

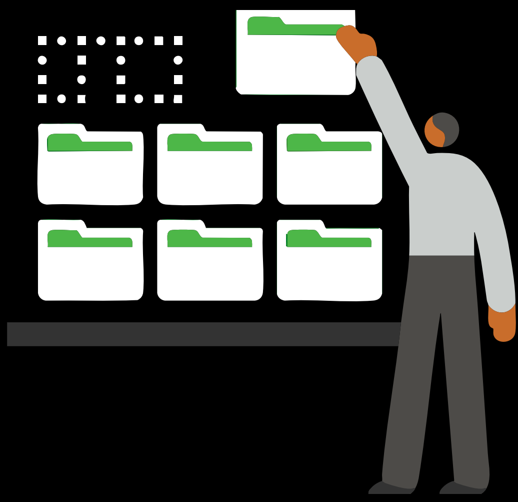
**Francisco Hortigüela Martos**,
President of AMETIC

### The core enabler of e-invoicing is structured data.

Without structured data, digital systems remain isolated silos. With it, entire financial workflows become synchronised, smarter, and faster. Invoices stop being static documents and become live information objects that move through systems, flagging issues, prompting payments, and feeding analytics.

## Unlocking value through structured data and the three waves of agentic AI

Structured data is information organised in a standard format that makes it easily accessible and understandable by both humans and machines. This organisation makes it easy to search, query, and analyse using various tools and techniques without manual intervention.



### The impact of structured data extends far beyond simple efficiency gains.

*"Structured data is the hidden engine of productivity. When invoices are machine-readable and standardised, they don't just move faster - they unlock automation, eliminate duplication, and allow AI to deliver real insights. That's how small businesses get the same efficiency advantages that were once only available to large corporations."*

**Marcus Laube**, CEO, Billentis

The integration of e-invoicing and tax compliance when embedded with accounting and ERP can enhance other capabilities, such as streamlining payments and invoices, and in the case of larger companies, automating supply chains and integrating finance and procurement. When all processes merge, we start to experience truly Integrated Digital Trade, where e-invoicing is - as Billentis refers to it - the 'foundational framework' for change.

The Billentis report makes clear that the clean, structured, real-time data e-invoicing can provide is a precondition for AI adoption at scale - and that e-invoicing is important infrastructure to get there.

### Three waves of agentic AI

Sage's three-wave roadmap[18] for AI demonstrates how advances in AI can maximise the opportunities from structured data foundations like e-invoicing:

**Wave 1** – Task-Based AI: Simple automations that handle routine tasks — like anomaly detection, invoice categorisation, or fraud alerts — depend on structured invoice data to work reliably in the background.

**Practical examples:**

- Automatically matching invoices to purchase orders and flagging discrepancies.
- Classifying expenses into accounting categories without human input

**Wave 2** – Generative AI: Tools like Sage Copilot use generative AI to help users explore financial data, generate reports, and speed up month-end close. But these tools can only produce trustworthy insights if they're built on clean, consistent datasets — not PDFs or spreadsheets.

**Practical examples:**

- Asking Copilot: "Why did our expenses increase in Q2?" and receiving a breakdown of invoice trends.
- Auto-generating cash flow forecasts and financial commentary from invoice and bank data.

**Wave 3** – Agentic AI: The next era will see autonomous systems that detect issues, reason across data, and take coordinated action with minimal human input. But this is only possible when business data — including invoices — is fully structured, machine-readable, and connected across systems.

**Practical examples:**

- An AI agent noticing a sudden drop in revenue, diagnosing the issue (e.g. payment delays from a key client), and escalating to finance with recommended actions.
- Proactively rescheduling supplier payments to avoid cash shortfalls - without manual prompts.

# The case for change

Whilst digitalisation has accelerated many aspects of the economy and delivered tangible benefits, such as halving payment times over a decade,[2] there are still many elements of running a business that could be automated to enable growth in trade, provide real-time data and insights for business operations, and deliver easier, more accurate tax compliance - increasing productivity and reducing the public sector tax gap.

Most importantly, pursuing a bold strategy for integrated digital trade will enable governments to connect the dots between different digital policy agendas relevant to running a business, from digitising customs and trade to e-procurement and sustainability. Governments and standards bodies now have the opportunity to set an agenda that, in conjunction with AI, can use e-invoicing as a foundation for fully integrating trade and connecting the economy.

Sage's panel of experts sets out why this is the key moment for policymakers and the technology sector to collaborate to reimagine business and set an ambitious path ahead for e-invoicing.

## Change is needed to address systemic economic challenges for the public and private sectors.

The global ratio of public sector debt to GDP is unprecedented, with the IMF forecasting it will reach nearly 100% by 2030 if current trends persist.[3] With growth across Europe and the US forecast to be as little as 1.5% in 2025[4] and labour productivity growth hovering at 1%,[5] trends are likely to persist unless significant structural reforms and productivity-enhancing measures are implemented.

## Too many frictions are holding back growth and productivity

SMEs today face persistent frictions that slow them down, waste valuable resources, and limit their ability to grow due to manual and slow processes - from keying in invoice data to managingfragmented communications with suppliers and customers - all while relying on incompatible tools and disconnected systems to complete basic financial tasks.

This research reveals that getting paid on time, dealing with customers and suppliers, and tax submissions are the top three barriers and areas of friction that over 55% of SMEs say are holding back growth. Nearly two-thirds of SMEs say these burdens materially limit their productivity. These are not just irritations: they mean fewer resources for talent, productivity, and growth.

> *"E-Invoicing represents a major opportunity to simplify administrative procedures and accelerate the digitisation of businesses. It is also an effective way of stepping up the fight against fraud. The State must guarantee a clear framework by creating a reliable and functional ecosystem, so that our businesses can commit to e-invoicing in the long term and with complete confidence. This is the only way that e-invoicing can be a guarantee of efficiency and competitiveness for our SMEs."*
>
> **Vincent Thiébaut,** Horizons & Indépendants MP, France

## Critical frictions to doing business

### 1. Duplicate or inaccurate data in business processes holds back payments

**Over 60%**
**of SMEs still rely on manual invoice input**

1 in 4 also report using three or more disconnected software systems to manage their finances - confirming the scale of the problem.

Cash flow is essential for SME health, yet **40%** of invoices are paid late. Without real-time visibility or standardised formats, it's hard to track payment status or improve performance. This leads to unnecessary borrowing and inhibits growth.

*"UK SMEs are collectively owed* ***£112 billion in late payments***,*[6] with the average small business waiting for nearly £42,000. Boosting the adoption of e-invoicing and similar infrastructure is essential to unlocking growth. We must continue building the digital foundations that will drive productivity and prosperity for the next decade."*

**Gregor Poynton**, Labour MP, UK

*"Manual workflows not only consume time, they also dramatically increase the probability of errors and disputes, slowing business cycles and increasing operating costs."*

**Marcus Laube**, CEO, Billentis

### 2. Increasing incidents of fraud targeting SMEs

**8 out of 10**
**SMEs now regularly receive fraudulent invoices, and nearly half have paid at least one.**

Current systems often make it difficult to detect or prevent fraud because the data is unstructured, and processes remain manual.

Recent estimates in the UK suggest fraud costs the economy £6.8 billion annually[7] - a burden that technologies like Digital Company ID have the potential to significantly reduce.

This aligns with findings from Billentis, which highlight that "fraud detection is reactive and inconsistent unless invoice authenticity is digitally validated at source."[8]

*"Most invoice fraud happens because our current systems rely on trust and manual oversight, rather than verification at source."*

**Marcus Laube**, CEO, Billentis

### The case for a Digital ID for business

As trade becomes more digitised, businesses, especially SMEs, today face a high cost burden when repeatedly undergoing KYC and KYB checks. These procedures are essential for verifying business identities in digital settings, but become expensive and inefficient when duplicated across platforms and scenarios.

SMEs also have to meet mandates for traceability across supply chains (such as in pharmaceuticals, trading, e-invoicing, food and beverage, and ESG). To comply, businesses must accurately identify every participant in a transaction chain.

Similarly, when it comes to e-invoicing, there is no consistent mechanism for verifying who is authorised to update a business's directory entry, which opens significant liability risks and administrative gaps.

A lack of government alignment on a standardised, universally accepted digital identifier makes this difficult. It increases the risk of fraud and misidentification, such as the use of impersonated business identities to deceive trading partners. The development of generative AI is creating new risks of fraud, particularly in the issuing of false e-invoices. 61% of SMEs think that AI will significantly increase the risk of invoice fraud or phishing scams.

This must ensure it incorporates all legal persons and avoids overly narrow definitions based on VAT registration. It should allow for different levels of trust by providing guidance on the verification needed to obtain Low, Substantial or High levels of assurance. Trust attributes should be able to be attached to any ID type or combination of types, ranging from VAT ID, to bank account ID, to tax ID (for individuals or corporates), or employer/PAYEE ID.

## 3. International trade: Paperwork and fragmentation are holding SMEs back

Cross-border trade is a key driver of SME growth - but the systems that support it remain fragmented, manual and inefficient. From customs documentation to invoice reconciliation, small businesses face duplicative processes that increase cost, reduce efficiency, and create avoidable friction.

According to the OECD and International Chambers of Commerce, trade-related procedures - including customs paperwork, data entry, and regulatory checks - on average involve as many as **36 original documents and 240 copies.**[9] Filling out these forms presents a disproportionately high cost for smaller firms. These burdens are not limited to tariffs but stem from the time, effort, and uncertainty created by inconsistent forms, reformatting requirements, and lack of interoperability between systems.

SMEs are also significantly underrepresented in international trade. Despite accounting for the vast majority of firms, they generate only around one-third of export value across OECD countries, often due to the higher per-unit transaction costs they face and the complexity of navigating multiple trade systems.

This fragmentation leads to practical consequences: delays in customs clearance, slow payment cycles, and frequent disputes due to mismatched or incomplete documentation. Without standardised invoice formats or digitally integrated systems, SMEs are forced to manage trade through email chains, PDFs, and manual reconciliation - slowing operations and increasing risk.

Progress is being held back by the absence of common standards for structured data to be shared between tax, customs, and trade systems.

*"Without harmonisation, the complexity and cost of supporting multiple national and proprietary formats hinders cross-border trade. We need unified, structured data to reduce friction and unlock productivity."*

**Carmen Cicirello**, Lead Advisor to the European Commission

*"E-Invoicing helps to reduce errors in tax submissions by automating the data entry and transmission process. This eliminates common mistakes associated with manual entry, such as typos or miscalculations."*

**Marcus Laube**, CEO, Billentis

## 4. The complexity of tax reporting

**69% of SMEs**

**said tax compliance is one of their biggest burdens.**

The lack of integration across systems forces businesses to manually extract and reformat data - increasing errors and creating unnecessary stress.

According to the UK Public Accounts Committee, it now costs **£15.4 billion a year for businesses to administer taxes.**[10] Similarly, a 2022 EU study found companies spend around €204bn annually on tax compliance costs,[11] while Americans are estimated to spend over 7.9 billion hours on IRS requirements in 2024.[12]

This administrative burden is leading to mistakes and issues in creating accurate tax. HMRC data shows that small businesses' share of the UK tax gap has increased dramatically from 48% in 2019-20 to 60% in 2023-24[13] - representing a disproportionate compliance challenge. Sage's research found that finance professionals are especially concerned with tax complexity, citing it as one of the top three issues preventing them from focusing on growing their business.

## 5. Lack of real-time insight for governments and businesses into the economy's performance

Governments lack timely visibility into how the economy is performing - particularly when it comes to small and medium-sized businesses. Most official data is based on retrospective filings, such as annual tax returns or quarterly VAT submissions, which can arrive months after the underlying transactions. As a result, public authorities are often acting with outdated information when trying to respond to fast-moving economic developments.

This lag creates blind spots across key areas of economic management. There is **little to no real-time insight into payment delays, cash flow pressure, or emerging growth or distress in specific sectors.** Governments also have limited visibility into SME-level trade activity, such as which markets firms are exporting to, how frequently payments are delayed, or where friction is building in the supply chain.

This lack of structured, timely data weakens the public sector's ability to design targeted interventions. During periods of inflation, energy price spikes, or supply disruptions, the delay in data prevents agile policymaking.

## 6. Sustainability requirements are outpacing SME capabilities

SMEs have a vital role to play in meeting the world's sustainability goals, but many are being held back from understanding and reporting on their emissions by complex, costly and time-consuming processes. While expectations around ESG disclosure continue to grow, the systems available to help small businesses comply have not kept pace.

According to Sage's 2024 *Path for Growth* report,[14]

**83% of SMEs**

**recognise sustainability as a business priority**

However,

**only 7.7%**

**are currently able to report on their sustainability performance**

The main reasons are clear:

**65%**

**cite the complexity of standards**

**73%**

**are deterred by the upfront costs of compliance**

Sage and the International Chamber of Commerce estimate a $789 billion global opportunity in green finance for SMEs.[15] Yet only 2.8% have applied for green finance in the past three years, largely due to low reporting capability.

This challenge is growing with expanded reporting obligations for larger companies. While most SMEs are not directly in scope, they are increasingly required to provide data as part of larger firms' supply chain disclosures. Without structured systems or real-time data, many small businesses struggle to meet these demands.

The impact is significant. SMEs with the ability to track and disclose sustainability metrics are 2.5 times more likely to implement substantial sustainability initiatives, highlighting the link between digital reporting and real-world impact.

Without simplification and automation, many SMEs will be excluded from green finance, procurement opportunities, and future regulatory readiness.

## 7. Access to finance: Paperwork and complexity are blocking capital

Access to finance is essential for SMEs to survive, invest, and scale. But today's processes make it unnecessarily difficult. Alongside cost and risk assessments, many small businesses are being held back by a more basic problem: paperwork.

According to the European Central Bank's 2024 SAFE survey,[16] the percentage of firms reporting obstacles to obtaining a bank loan is increasing.

Among microenterprises, **nearly one in five bank loan applications are rejected**, and 7% of businesses report being discouraged from applying at all due to the complexity of the process.

This administrative burden is inefficient and exclusionary. OECD data shows that SMEs globally access just 37% of trade finance demand, with rejection rates around 45% compared with just 17% for multinationals.[17] This gap largely stems from fragmented documentation, non-standardised financial data, and regulatory complexity across borders.

These manual hurdles limit the ability of lenders to assess creditworthiness in real time. Businesses are forced to compile bespoke applications, provide redundant paperwork, or navigate multiple platforms, draining time and resources.

Without reform and closing the gap in access to finance between large and small businesses, access to capital will remain a structural drag on SME growth. With better digital infrastructure, including e-invoicing and interoperable data systems, financial institutions can make faster, more accurate decisions, while SMEs gain a clearer path to the capital they need to grow.

**Taken together, the stakes are significant.**

SMEs are burdened by outdated systems that waste time, increase risk, and hold back growth. Governments are flying blind, unable to access real-time economic insights. And economies across Europe and beyond are contending with slowing growth, rising debt, and persistent productivity challenges.

**The cost of inaction is high.**

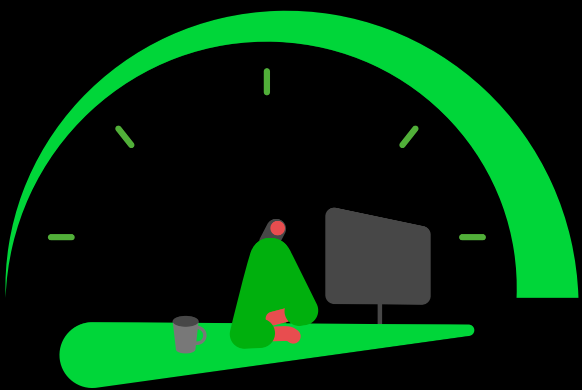
But so is the opportunity. Sage's 2024 report, *Paving the Way to a Connected Economy*, which this report builds on, found that widespread e-invoicing adoption across Europe could generate up to **€14 billion in annual savings** for small and medium businesses by reducing manual effort and streamlining finance workflows. That opportunity remains largely untapped.

# Tackling frictions with e-invoicing and AI

Today, data needed for critical business processes is often fragmented or locked in unusable formats. Addressing this will be critical for building AI solutions for business. Yet business operations remain outdated, invoices are still sent as PDFs, data sits in disconnected silos, and critical processes - from payments to compliance - still rely on manual effort. The result for businesses is wasted time, higher costs, and slower decisions.

*"Right now, too much business data is locked in PDFs and spreadsheets. Structured invoicing creates clean, consistent datasets that AI needs to work with. It's the first step in turning financial admin from a burden into a strategic advantage."*

**Marcus Laube**, CEO, Billentis



Below are key examples of where e-invoicing, linked to other systems like payments and trade, and powered by AI, can transform how systems work.

## Late payments

**How e-invoicing helps:** E-Invoicing reduces average payment times by up to 4 days by enabling real-time invoice tracking, automated reminders, and greater payment visibility. Built-in validation also reduces disputes that typically delay payment. Previous Sage research has found that e-invoicing dramatically reduces incidents of late payments by 20%, cutting average payment times by four days.

Real-time delivery reduces the lag between issuing and receiving payments, while structured data eliminates the need for double entry or manual reconciliation. Invoice data feeds dashboards and forecasting tools, enhancing cash flow control.

According to Sage's 2024 research, small companies in the EU (under 50 employees) could save 5 hours and 40 minutes per week through adopting e-invoicing, which is worth €13,500 per company per annum. In the UK, this is worth £11,300 per company per annum.

Mandated e-invoicing will lead to a more real-time view in accounting data of when and where SMEs are being paid late. Sage is already using anonymised accounting data to track late payment in the UK.

**Recommendation for governments:**
**Mandate the use of structured invoice formats** across the economy and ensure they are interoperable with core payment systems — including bank platforms, fintech providers, and accounting software — to enable straight-through processing.

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## Fraud

**How e-invoicing helps:** E-Invoicing enables digital validation of invoice authenticity at source, helping businesses flag suspicious entries before payment. Structured data reduces human error and creates audit trails. Built-in validations and identity checks protect against false invoices.

Billentis' research has highlighted that "fraud detection is reactive and inconsistent unless invoice authenticity is digitally validated at source."

*"E-Invoicing establishes a transparent and auditable digital trail, significantly minimising opportunities for tax evasion and fraudulent activity. When done right, it allows us to embed trust into the system itself - validating authenticity before an invoice is ever paid, and eliminating the guesswork that costs businesses billions."*

**Marcus Laube**, CEO, Billentis

**Recommendation for governments:**
**Include mandatory data fields** such as verified sender IDs and invoice metadata in national standards. Design e-invoicing to enable fraud detection by default.

**Embed secure digital identity into e-invoicing systems to build trust and reduce fraud**

Governments should ensure that e-invoicing systems are linked to a trusted digital identity infrastructure, such as the upcoming European Business Wallet. Verifiable sender IDs — help authenticate invoices at source, reduce impersonation risks, and support fraud detection by default. This is especially critical as invoice fraud continues to rise, with **four out of five (79%)** of SMEs receiving a fraudulent invoice in the past year.

## Trade and supply chain fiction

**How e-invoicing helps:** Structured invoice data enables interoperability across countries, reduces customs processing times, and improves coordination between supply chain actors. When a critical mass of businesses adopt e-invoicing, it creates network effects. Suppliers, customers, banks, and tax authorities begin to align on a shared data language.

The World Trade Organization has recognised that digital tools - including e-invoicing and electronic customs procedures - are critical to lowering transaction costs and strengthening trade resilience.[19]

**Recommendation for governments:** Adopt and mandate the use of a **single, harmonised technical standard** (e.g., PINT) based on the globally used semantic model EN 16931 to ensure interoperability and reduce compliance costs in both domestic and international transactions.

*"Governments need to think globally and act in coordination. A patchwork of rules undermines the potential of digital trade. Standards and cooperation are essential."*

**Jason Oxman**, ITI

## Tax compliance

**How e-invoicing helps:** E-Invoicing automatically populates tax-relevant fields and can integrate with real-time reporting systems. This reduces reporting burdens, improves accuracy, and closes tax gaps. Tax calculations, pre-fill reporting templates, and required fields help catch errors and simplify VAT submissions.

Countries that have mandated e-invoicing are seeing substantial returns.[20] Italy, the first EU member state to implement comprehensive requirements, has generated approximately €6 billion in additional annual revenue. In Latin America, Brazil saw a $58 billion increase in tax revenue by closing invoicing gaps, while Chile, Mexico, and Colombia each reduced their VAT gaps or tax evasion by up to 50%.

**Recommendation for governments: Link e-invoicing systems to tax authorities** and **pre-fill VAT/tax templates** through machine-readable formats. Ensure e-invoicing is integrated into the national tax infrastructure.

## Government insight and economic data gaps

**How e-invoicing helps:** E-Invoicing generates live economic data that can be aggregated (with appropriate safeguards) to track trends, spot downturns early, and improve policy targeting. Structured invoice flows allow faster VAT collection and reduced tax fraud, greater insight into sectoral performance and economic trends, more precise targeting of support during economic shocks, and streamlined grant and subsidy delivery mechanisms.

*"With standardised, structured invoice data, governments can make more informed economic and fiscal policy decisions and benefit from improved macroeconomic monitoring."*

**Carmen Cicierello**, Lead Advisor to the European Commission

**Recommendation for governments:** Governments should **treat e-invoicing as economic infrastructure** and design systems to deliver anonymised, summarised visibility into economic activity, including payments, tax, and supply chain disruptions.

## Spotlight: Sage Data for Good & late payment tracker

Late payment has been identified as one of the most persistent challenges faced by SMEs, an issue that doesn't just affect firms but the entire economy.

Through Sage's Data for Good programme, we created the Sage SME Tracker with our partners, Smart Data Foundry and CEBR, which is one of the most comprehensive real-time datasets on the financial health of UK small businesses, built from anonymised, aggregated activity across 138,000 firms. This quarterly report provides further data on the frictions affecting SMEs, highlighting late payments.

By using anonymised invoice and payment data from Sage Accounting software, we can monitor when invoices are sent, how quickly they are paid, and where delays are most common.

This allows us to track the full lifecycle of a transaction, from issuance to settlement, helping us identify trends across different sectors, regions, and business sizes. For example, we can pinpoint which industries are most affected by delayed payments - insights that can inform both business practices and government policy.

With e-invoicing, this data will become even more timely and granular, enabling real-time insights that can be used to design targeted interventions, evaluate the impact of payment regulations, and ultimately help recover the cash flow held back by unpaid invoices.

This is how Sage is turning data into action, supporting small businesses and improving the resilience of the wider economy.

### Sustainability and ESG reporting

**How e-invoicing helps:** E-Invoicing can embed critical sustainability metrics directly into everyday business operations. Structured invoice formats can carry fields for GHG emissions, emissions intensity, supplier location, and ESG indicators, enabling automated, auditable reporting with minimal manual effort. According to Sage research, 32% of SMEs believe e-invoicing could streamline their sustainability reporting, transforming a compliance burden into a digital opportunity.

**Recommendation for governments:** Policymakers should **extend their e-invoicing standards** (such as Europe's BIS 3.0) to include optional ESG-related data fields aligned with global frameworks such as the GHG Protocol, WBCSD's PACT, and the ISO Net Zero Standard. Governments should also explore incentives - such as preferential treatment in public procurement - for businesses adopting these fields. This would accelerate greener, more transparent supply chains and make sustainability reporting more accessible for SMEs.

E-Invoicing, long viewed as a back-office efficiency tool, is now emerging as a foundation for digital sustainability reporting, scaling decarbonisation and ESG integration across Europe's SME ecosystem.

## Access to finance

**How e-invoicing helps:** With structured invoice data, lenders and fintech providers can automate credit assessments, offer real-time pre-approvals and reduce reliance on historical data and credit scoring models. AI systems can analyse trends in invoice flow, payment timing and cash cycles - making finance faster, more accessible, and more tailored to SME needs. This helps level the playing field between small firms and larger corporations, who typically have dedicated finance teams and formal reporting systems.

**Recommendation for governments:** Enable secure, **standards-based APIs** that allow SMEs to share verified e-invoicing data with accredited lenders and credit scoring platforms. **Incorporate e-invoicing into SME finance strategies** to reduce friction in loan approvals and promote the development of invoice-backed lending and embedded finance products across Europe and the UK.

*"The value to our financial markets of having way more confidence in a business's financial data is astronomical. This is the thinking we need to transform the industry away that does reports on cycle and where trust comes on a periodic basis."*

**Aaron Harris**, CTO, Sage

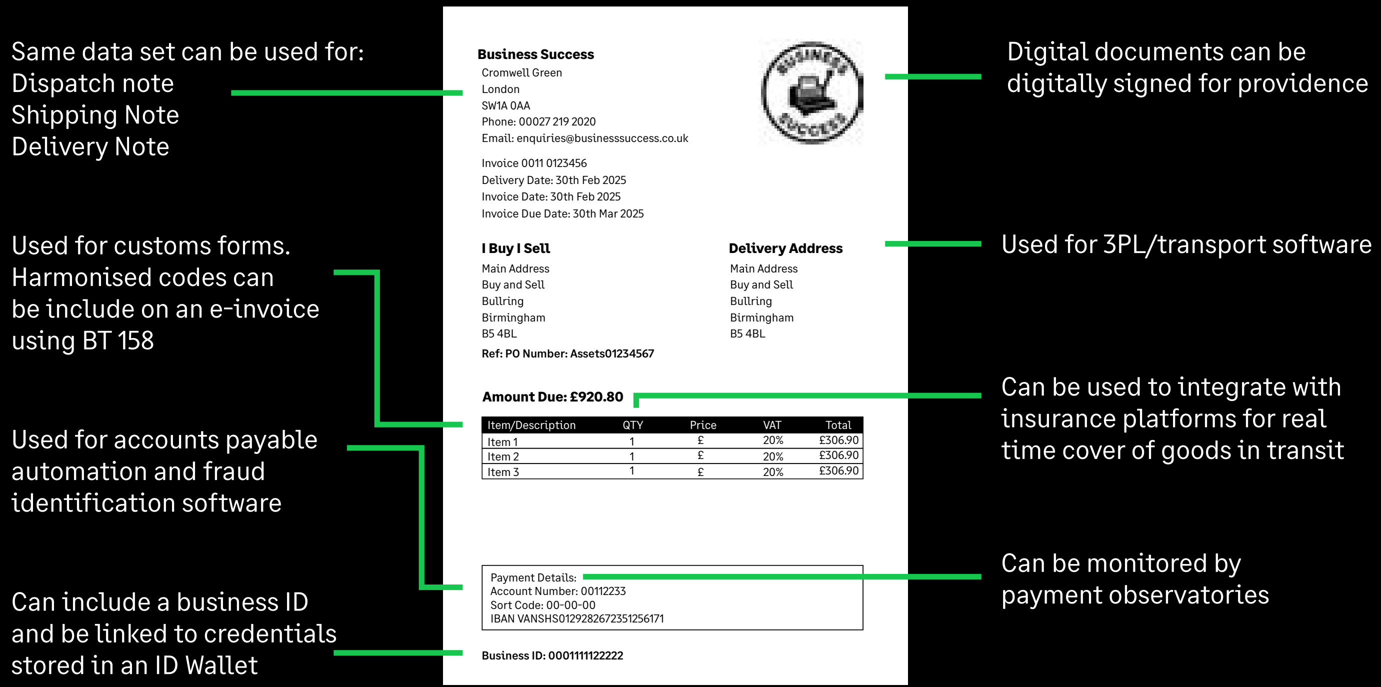
*"E-Invoicing can offer improved real-time access to finance. This could offer several benefits: enhanced credit status impact; better access to trade finance; increasing the finance options available and lowering the cost of those finance options."*

**Glenn Collins**, ACCA UK

When invoices include structured data and the right fields, they unlock the full benefits of digital trade and AI integration. Below is an example of an invoice designed to support these capabilities.

# The art of the possible: An illustration of the key data e-invoicing can share in real-time

Illustrative purposes only



**Business Success**
Cromwell Green
London
SW1A 0AA
Phone: 00027 219 2020
Email: enquiries@businesssuccess.co.uk

Invoice 0011 0123456
Delivery Date: 30th Feb 2025
Invoice Date: 30th Feb 2025
Invoice Due Date: 30th Mar 2025

**I Buy I Sell**
Main Address
Buy and Sell
Bullring
Birmingham
B5 4BL

**Delivery Address**
Main Address
Buy and Sell
Bullring
Birmingham
B5 4BL

**Ref: PO Number: Assets01234567**

**Amount Due: £920.80**

| Item/Description | QTY | Price | VAT | Total |
|---|---|---|---|---|
| Item 1 | 1 | £ | 20% | £306.90 |
| Item 2 | 1 | £ | 20% | £306.90 |
| Item 3 | 1 | £ | 20% | £306.90 |

Payment Details:
Account Number: 00112233
Sort Code: 00-00-00
IBAN VANSHS0129282672351256171

**Business ID: 0001111122222**

# Where are we now?

## Adoption and attitudes to e-invoicing

Governments worldwide are embracing e-invoicing as a first step to integrated digital trade. This report captures the state of e-invoicing adoption and readiness among SMEs across the EU, UK, and US, with a focus on markets moving fastest - including France, Germany, and Spain - and on accountants and bookkeepers, the trusted advisors guiding SMEs through digital change.

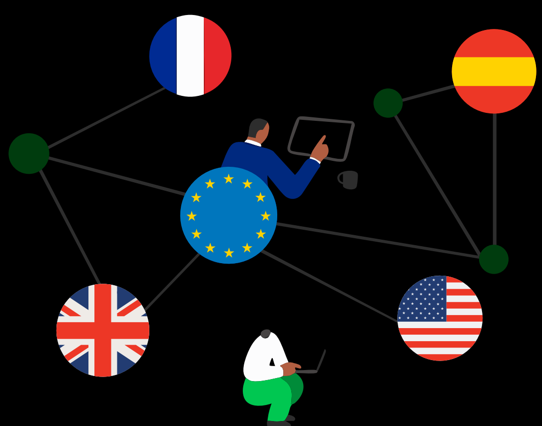
Our findings reveal a clear gap: even among those who know what e-invoicing is, its benefits are not widely understood. With regulatory deadlines looming, bridging this gap is vital - and accountants will play a central role in helping SMEs make the leap.

### Where mandation is happening and what comes next

Across the **EU**, momentum is building. The European Commission's *VAT in the Digital Age* (ViDA) reforms will make structured e-invoicing and real-time digital reporting mandatory by 2030, replacing fragmented national rules and creating a single standard to support seamless, cross-border trade.

Within Europe, **France** is set to mandate e-invoicing for all businesses from 2026, starting with large firms and expanding in phases. The rollout will use certified private platforms and France's Chorus Pro system to ensure security, interoperability, and tax compliance.

**Spain** is also moving fast. Under its new *Crea y Crece* law, e-invoicing will become mandatory for B2B transactions beginning in 2025 for larger companies, with full implementation by 2026. The reform aims to reduce fraud and improve payment times for SMEs.



In the **UK**, while no mandate is yet in place, the government has actively consulted on promoting e-invoicing across UK businesses and the public sector and its potential benefits. E-Invoicing is already required in some public procurement processes via PEPPOL.

The **United States has** no national requirement, but momentum is growing. The Digital Business Networks Alliance (DBNAlliance) — incubated by the Business Payments Coalition and supported by leading industry groups — has launched the Open Exchange Network, a new initiative to enable businesses to exchange e-invoices regardless of their platforms or systems. With over 40 members, the network introduces shared technical standards to foster interoperability and lays the foundation for potential future adoption.

**Recommendation for governments:**
As countries move to mandates, to simplify compliance and reduce cost, governments should **move toward a single harmonised standard** that is based on EN 16931, so that SMEs only need to integrate once to trade with any partner or system.

**Recommendation for governments:**
As part of mandates, **begin integrating e-invoicing with wider procurement infrastructure,** including procurement platforms, fast payment systems, and invoice financing networks to unlock broader economic value.

**Recommendation for governments:**
We recommend that all governments **embed business identity wallets** as a trusted mechanism to identify counterparties in the digital exchange of trade documents (such as the upcoming European Business Identity Wallet) so businesses can safely expand their cross-border activities with reduced risk.

## Mandation is accelerating - but preparedness is not keeping pace

In European markets with mandates, awareness is growing but remains inconsistent:

Across all surveyed markets, awareness has risen from **28% in 2023 to 39% in 2024.**

- Growth is stronger in countries with mandates: **France** (34% 2024 → 49% 2024), **Spain** (31% → 50%), **Germany** (36% → 48%).
- In contrast, the **UK** lags significantly in awareness (7% → 11%), and the **USA** trails even further at just **3%** awareness.

**Recommendation for governments:** Governments should launch mass awareness campaigns with clear guidance for businesses. Mandates alone are not enough. Targeted support — including sector-specific guidance and accessible tools — is essential to ensure SMEs can adopt e-invoicing confidently and on time.

## SMEs are unclear on the benefits - and unready for what's next

Despite this clear increase in awareness, many businesses remain unprepared. The jump in awareness has not yet translated into meaningful readiness or adoption.

Among SMEs who are already familiar with e-invoicing:

- Nearly **half (47%)** say they still don't have a clear view of how it will impact their business.
- Only **29%** believe it will be a good use of their time - while **24%** see it as primarily a cost.

*"When electronic invoicing becomes mandatory by law, the implementation process will become less complicated, more automatic, and transparent."*

**Sergio Coscolín,** IT Manager at Grupo Crisol.

Even in countries with confirmed mandates:

- **Fewer than half** of SMEs aware of upcoming rules feel fully prepared.
- **One in four** (25%) say they feel "not at all prepared" to comply with e-invoicing requirements.

**Recommendation for governments:** For SMEs to fully benefit, **e-invoices should be designed to carry optional fields** - such as emissions data, fraud indicators, or finance terms. This unlocks automation, reporting, and trust across supply chains.

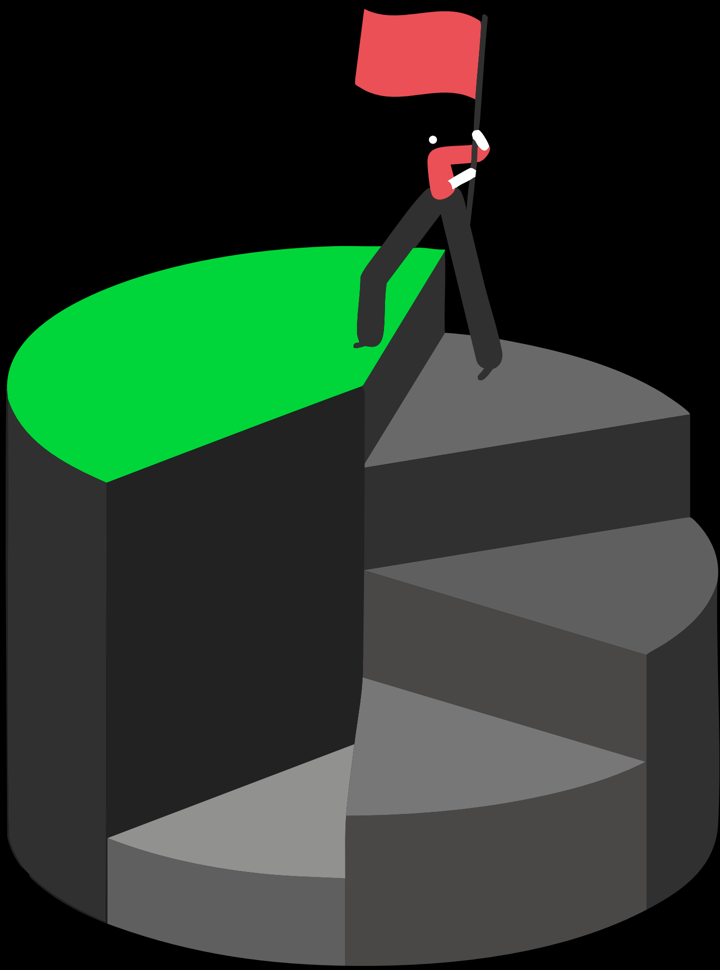
When asked about likely adoption:

- **45%** of SMEs in Europe say they are likely to adopt e-invoicing in the next two years - up from 41% last year.
- But in the **UK**, that figure drops to just **29%**, and in the **USA** only **18%** — indicating a much slower path to adoption without mandates.

**Recommendation for governments: Include e-invoicing explicitly in national digital strategies** - and talk about e-invoicing as the foundation of the future digital economy. Governments should explicitly reference e-invoicing in broader digitisation plans.

## Businesses are calling for practical, targeted support

When asked what would help them prepare:



**52%**

**Half of businesses (52%)** say **financial support or subsidies** would make the biggest difference.

**48%**

**Half (48%)** want clear, step-by-step guidance to get started.

**33%**

**A third (33%)** call for consistent standards across jurisdictions to simplify compliance. **52%** say financial support or subsidies would make the biggest difference.

These requests highlight that technical complexity and financial cost remain key barriers to adoption.

**Recommendation for governments:** Governments should **set bold national targets and coordinate with software providers**. With clear ambition - such as full e-invoicing adoption within 3–5 years - vendors can plan and deliver built-in, compliant solutions at scale. This maximises uptake and minimises cost. Governments and industry must pair mandates with practical implementation support. This includes clear timelines, templates, and incentives. National targets encourage organisations and industry to offer this kind of support.

# How governments are moving to integrated digital trade

## EU case study

The EU is shifting from a document-based to a data-driven Single Market, with e-invoicing identified as a key enabler of this transition.

It plans to introduce measures to encourage the reuse of e-invoice data for automated reporting, including a pilot for sustainability reporting and linking e-invoices with customs data.

**The EU Customs Data Hub** is a key element of the EU's Customs Reform. Customs data will only need to be submitted to the EU Customs Data Hub, as opposed to the multiple interfaces from the many separate systems in place across the EU Member States today, saving Member States up to €2 billion a year in operating costs.

**A revision of e-invoicing in public procurement rules (2014/55/EU)** is planned for 2026, transforming it into a Regulation to further boost adoption and ensure interoperability, also making the EU e-invoicing standard mandatory for public procurement, particularly to support SME adoption.

The **European Business Wallet** will provide a digital identity for economic operators, allowing them to share verified data and credentials securely. It will also offer a legally recognised communication channel with public authorities, facilitating smoother interactions and lowering the cost of regulatory compliance.

The **Digital Product Passport** (DPP) will become the key tool for sharing and accessing product-related information. It will act as a digital repository containing digital labels, conformity certificates, user manuals, safety details, technical documentation, and other information mandated by EU regulations. This information will be accessible through a data carrier, such as a QR code, attached directly to the product, to retrieve the required details. The DPP could be linked to the related products in e-invoices.

The **Electronic Freight Transport Regulation** will modernise freight transport across the EU by promoting the shift from paper-based to data across all modes of transport: road, rail, inland waterways, and air. This digital shift aims to reduce administrative burdens for both operators and authorities, strengthen data security, and support compliance with EU and national freight regulations.

# Mandation triggers investment by ERP providers to support the transition to integrated digital trade

**Sage's commitment to supporting SMEs to embed e-invoicing solutions:**

With clear government mandates, deadlines, and efforts to support standardisation, ERPs like Sage will move to embedding e-invoicing accounting solutions for SMEs, encouraging SMEs to invest in digital tools but removing the cost to comply. For example Sage will integrate e-invoicing compliance into all its solutions in France at no extra cost. Our broader aim is to ensure e-invoicing reform is an opportunity to accelerate digital transformation, boosting productivity and operational efficiency, and enabling companies to focus fully on their core business. The Sage Network, a digital platform designed to connect all the players in the financial chain – customers, suppliers, chartered accountants, banks– will further streamline exchanges, automate processes, and strengthen cooperation between all the links in the economy and support the evolution of Integrated Digital Trade.

## Role of accountants: Leading advocates for e-invoicing and Integrated Digital Trade

Accountants and bookkeepers are among the most trusted partners for SMEs - critical to helping businesses make the leap to e-invoicing. Their knowledge of business operations, tax, and compliance puts them in a unique position to guide SMEs through the transition. Most are already familiar with e-invoicing and see the benefits clearly.

**Awareness levels are strong:**

**81%**

**of accountants and bookkeepers in Europe are familiar with e-invoicing.**

In the UK, awareness stands at **66%**; in the USA, **52%**.

**Among those familiar, accountants and bookkeepers are positive about e-invoicing and see a wide range of benefits:**

**86%** **would recommend e-invoicing to their clients.**

They see wide-ranging benefits for their clients:

**8 out of 10 (85%)** call out facilitated tax compliance.

**8 out of 10 (79%)** report automation of financial processes.

**7 out of 10 (73%)** highlight the fraud reduction.

**6 out of 10 (59%)** point to faster payments, **6 out of 10 (61%)** to simplified trade,

and **4 out of 10 (41%)** improved data sharing between businesses.

The role of accountants and bookkeepers is already evolving. As e-invoicing becomes embedded in business systems, these professionals are positioning themselves as enablers of broader digital change.

The accounting industry is already a major contributor to the global economy. In the UK alone, it is worth £33.3bn and employs 323,000. Looking ahead, e-invoicing and the move to integrated digital trade combined with AI are expected to transform the nature of accounting and bookkeeping services - shifting time away from manual entry and error-checking, towards continuous insights and strategic advice.

**64%**

of accountants and bookkeepers across Europe say they expect their role to become more proactive and strategic within five years.

**73%**

view e-invoicing as a gateway to broader digitalisation across the businesses they support.

**84%**

say they are confident in helping clients adopt e-invoicing.

**74%**

believe it will reduce admin time, allowing them to focus on higher-value work.

Over **40%**

say it will improve forecasting, decision-making, and advisory services.

# How AI can be brought together with e-invoicing for maximum impact

**Case study:** Sage Copilot

Layering e-invoicing with other technologies unlocks new levels of productivity, automation, and business growth. A perfect next step for SMEs after implementing e-invoicing is adopting AI-powered tools, not only to enhance efficiency but also to ensure a smooth transition, as one technology reinforces the other. Surveys among companies adopting e-invoicing are clear: 9 in 10 SMEs that implemented e-invoicing have gone on to adopt additional digital tools such as AI or cloud technologies.

For AI to deliver real value, it requires clean, structured, and consistent data. E-Invoicing provides exactly that – creating a digital infrastructure that AI can leverage to automate processes, reduce friction, and uncover insights.

Sage Copilot is an AI-powered tool that helps SMEs manage their invoicing lifecycle more intelligently. It automates invoice creation, approval, and payment, and taps into e-invoice data to generate real-time performance insights. Acting as a virtual assistant, Sage Copilot simplifies financial operations and reduces administrative workload.

With Sage Copilot, SMEs experience fewer manual errors, faster approval cycles, reduced late payments, and better visibility into their cash flow. Automation frees up staff time, while Sage Copilot's real-time dashboards provide actionable insights into payments out of the ordinary, trends, and anomalies. In today's digital landscape, waiting until month-end to understand your business's financial health is no longer necessary. With structured data from e-invoicing and intelligent AI tools like Copilot, insights are available continuously, offering SMEs a real-time understanding of their cash flow and business performance, whenever they need it.

An emerging generation of AI agents will orchestrate complex workflows across systems. In early use cases, customers can ask natural language questions like "What caused the drop in Q2 revenue?" and receive grounded, contextual answers, powered by retrieval-augmented generation (RAG) and multi-agent coordination.


*"Finance professionals would benefit from cost-effective e-invoicing solutions, particularly through the adoption of a single shared standard. This would unlock a range of benefits for finance professionals, businesses, and governments, from lower costs and better access to credit, to improved forecasting and decision-making."*

**Glenn Collins**, ACCA UK

*"Electronic invoicing should serve as a foundational element in the long-term shift toward automating business transactions and financial operations."*

**Marcus Laube**, CEO, Billentis

# Government recommendations: Summary

Backed by an international panel of experts and a survey of 11,250 SMEs and accountants, this report reveals how structured invoice data can unlock significant productivity gains, reduce fraud, accelerate payments, and simplify tax compliance, ultimately enabling SMEs to thrive in a digital-first economy.

The report outlines a bold vision: E-Invoicing is not just about digitising paperwork, it's about building the digital infrastructure for a smarter, faster, and fairer economy.

To unlock this, governments are urged to take the following actions:

### Prioritise e-invoicing as core to future digital infrastructure

**Why:** It boosts productivity, reduces fraud, and enables real-time economic insight.

**Action:** Embed e-invoicing into national digital strategies and economic planning.

### Mandate structured e-invoicing across the economy

**Why:** Voluntary uptake is too slow. Mandates drive adoption and unlock benefits.

**Action:** Introduce phased mandates for all businesses, starting with larger firms.

### Adopt a single, harmonised standard

**Why:** Avoids fragmentation and reduces compliance costs for SMEs

**Action:** Use the EN 16931 standard (already used across the EU) to ensure interoperability.

### Integrate e-invoicing with procurement infrastructure

**Why:** Linking to tax, procurement, and payment systems maximises impact.

**Action:** Connect e-invoicing to VAT systems, customs, and public procurement platforms.

### Embed digital identity and fraud prevention

**Why:** 79% of SMEs report receiving fraudulent invoices.

**Action:** Require verified sender IDs and link e-invoicing to trusted digital ID systems.

### Support SMEs with awareness, tools, and funding

**Why:** Many SMEs are unaware or unprepared for e-invoicing.

**Action:** Launch national awareness campaigns, provide step-by-step guidance and sector-specific support, and offer financial incentives or subsidies to ease adoption.

### Prioritise e-invoicing as core to the future digital infrastructure

**Why:** Governments currently rely on outdated data to understand the economy.

**Action:** Use anonymised e-invoicing data to track economic trends and inform policy.

### Promote access to finance through e-invoicing

**Why:** SMEs face high rejection rates for loans due to paperwork and poor data.

**Action:** Allow lenders to access verified invoice data via secure APIs to speed up credit decisions.

### Incorporate ESG and sustainability metrics

**Why:** SMEs struggle to meet growing sustainability reporting demands.

**Action:** Add optional ESG fields to e-invoices and incentivise their use in procurement.

### Coordinate internationally

**Why:** Fragmented rules hinder cross-border trade.

**Action:** Align with global standards and collaborate with other governments to reduce trade friction.

### Link to customs and border processes

**Why:** This reduces clearance times and errors, and supports pre-clearance and automated checks.

**Action:** Structured invoice data can be linked directly to customs declarations.

# Conclusion

**This report makes clear that governments have a generational opportunity to transform how economies function.**

The technology exists. The standards are proven. The benefits are quantified. What's needed now is decisive, co-ordinated action to build the infrastructure that will power digital, data-rich economies into the next decade.

**The silent revolution of e-invoicing is ready to become the foundation of something greater - a connected, intelligent economy that works faster, fairer, and smarter.**

# Country call outs

Within our study, there were significant differences between European markets. Key differences are summarised below:

## France

**France's 2026 mandate is fast approaching, and awareness is growing — but many SMEs still feel unprepared. While digital foundations are stronger than in some markets, SMEs are calling for more support with implementation.**

- 68% experience significant problems getting paid on time.
- 75% experience significant frictions managing their tax reporting.
- 49% of SMEs are familiar with e-invoicing — up from 34% in 2023.
- 40% worry about the cost of compliant systems.
- 38% support mandatory B2B e-invoicing.
- 47% struggle with ERP or software integration.
- 88% of French accountants recommend e-invoicing to their clients.
- 75% of French accountants see themselves as becoming more strategic in their role.

## Germany

**Despite strong digital infrastructure and a 2025 e-invoicing mandate on the horizon, many German SMEs remain underprepared. There are clear calls for financial and technical support.**

- 48% of SMEs are familiar with e-invoicing — up from 36% in 2023.
- 57% say customer delays in payment affect their ability to pay suppliers.
- 60% want more step-by-step guidance to accelerate adoption.
- 48% want financial incentives to accelerate adoption.
- 37% support mandatory B2B e-invoicing.
- 42% report problems integrating e-invoicing with their software.
- 90% of German accountants recommend e-invoicing to their clients

89% of German accountants are confident they can support their clients through the e-invoicing process.

## Portugal

**Portugal leads Europe in awareness — but high fraud exposure and ongoing inefficiencies point to a need for stronger systems.**

- 85% of SMEs are familiar with national e-invoicing requirements.
- 15% have adopted e-invoicing for B2B transactions.
- 45% want consistent rules / standards to accelerate adoption.
- 60% have paid a fraudulent invoice - the highest of all countries surveyed.
- 64% say they receive suspicious invoices weekly or more.
- 50% say it is difficult to work with customers' finance teams.
- 55% support mandatory B2B e-invoicing.
- 47% receive invoices with missing or unclear information.

# Country call outs

## Spain

**Spain's regulatory push via the Crea y Crece law is prompting rapid awareness and growing public support.**

- 50% of SMEs are familiar with e-invoicing — up from 31% last year.
- 10% currently use e-invoicing for B2B.
- 60% of SMEs support mandatory B2B e-invoicing — among the highest levels of support.
- 57% say late payments cause serious cash flow problems.
- 68% experience significant frictions managing their tax reporting
- 49% blame delays in customer approval as the top reason for being paid late.
- 51% report having experienced invoice fraud.
- 52% are looking for real-time or automated solutions to simplify compliance.

## United Kingdom

**With no mandate in place and low public awareness, the UK is trailing its European peers in both familiarity and adoption. Yet late payments are relatively high - signalling potential demand for smarter invoicing solutions.**

- 11% of SMEs are familiar with e-invoicing — the lowest of all European surveyed markets.
- Only 3% of SMEs currently use B2B e-invoicing.
- 29% expect to adopt it in the next two years — far below the 45% EU average.
- 37% of invoices sent by SMEs are paid late.
- 50% of UK CEOs or COOs spend time on invoicing each week.
- 53% report difficulty gathering the right invoice data internally.
- 52% say the invoices they receive are error-prone or unclear.
- 42% support mandatory B2B e-invoicing — despite no policy yet in place.

## United States

**The US lacks a federal e-invoicing mandate, and awareness remains limited. But American businesses face many of the same frictions as their European peers — suggesting a future pivot toward more structured data solutions.**

- Just 3% of SMEs are familiar with e-invoicing.
- 65% experience significant frictions getting paid of time.
- 34% expect to adopt in the next two years - significantly below other markets surveyed.
- 35% of invoices are paid late - close to the EU average.
- 43% of CEOs/COOs deal with invoicing weekly.
- 38% report internal challenges collecting invoice data.
- 41% say supplier invoices are often incomplete or incorrectly formatted.
- 30% support mandatory B2B e-invoicing — still a minority view, but growing.

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# Appendix: Global progress

**The global e-invoicing landscape is evolving rapidly.** The table below summarises the current status of e-invoicing mandates, major policy changes, and compliance requirements across a selection of key economies - including the UK, USA, major EU Member States, Canada, and other influential markets. While not exhaustive, it offers a snapshot of global momentum and helps compare timelines, regulatory approaches, and implementation progress across regions.

This table is designed to help you quickly compare the regulatory landscape, key dates, and status of e-invoicing initiatives across these countries.

| Continent | Country | Type of Mandate (B2G/B2B) | Major Recent Changes | Voluntary or Mandatory | Who Must Comply & Thresholds | Current Status |
|---|---|---|---|---|---|---|
| **Asia** | China | B2G/B2B: Mandatory (phased) | Fully digital e-fapiao mandatory nationwide since Dec 2024 | Mandatory (phased) | All businesses (phased by region/sector) | Mandatory since Dec 2024; transition period until Sep 2025 |
| | India | B2B: Mandatory (phased by turnover) | 30-day reporting deadline from Apr 2025; B2C pilot started | Mandatory (phased) | Businesses above turnover thresholds | Mandatory for Rs 5+ crore; 30-day rule from Apr 2025 |
| | Japan | B2B: Qualified Invoice Mandatory (for VAT credits) | Qualified invoice system since Oct 2023 | Mandatory for VAT credits | All VAT-registered businesses | Qualified Invoice Enforced for VAT credits |
| | Singapore | B2B: Voluntary | InvoiceNow phased for GST-registered from May 2025 | Mandatory (phased) | GST-registered businesses, phased by registration | Voluntary |
| | South Korea | B2B: Mandatory (VAT-registered) | E-invoicing for VAT-registered since 2011 | Mandatory | All VAT-registered businesses | Fully enforced |
| **Europe** | Belgium | B2G: Mandatory (2026); B2B | B2G for new contracts since 2024; B2B from 2026 | B2G: Mandatory; B2B: Mandatory (planned) | B2G: Public suppliers; B2B: Domestic B2B, exemptions | B2G: Enforced; B2B: Awaiting rollout |
| | France | B2G: Mandatory; B2B: Phased 2026-2027 | B2B e-invoicing and e-reporting phased from 2026 | B2G: Mandatory; B2B: Mandatory (phased) | B2G: Public suppliers; B2B: VAT businesses, phased by size | B2G: Enforced; B2B: Delayed until Sept 2026 |
| | Germany | B2G: Mandatory; B2B: Phased 2025-2028 | B2B mandate from 2025, phased by turnover until 2028 | B2G: Mandatory; B2B: Mandatory (phased) | B2G: Public suppliers; B2B: VAT businesses, phased by turnover | B2G: Enforced; B2B: Receiving mandatory Jan 2025 |

# Appendix: Global progress

| Continent | Country | Type of Mandate (B2G/ B2B) | Major Recent Changes | Voluntary or Mandatory | Who Must Comply & Thresholds | Current Status |
|---|---|---|---|---|---|---|
| **Europe** | Italy | B2G/B2B/B2C: Mandatory | Full mandate since 2019 | Mandatory | All VAT-registered businesses (some exemptions) | Fully enforced |
| | Netherlands | B2G: Mandatory (central); B2B: Voluntary | Central government has been able to receive B2G e-invoices since 2019; it will become mandatory to send B2G invoices from January 2026 | B2G: Mandatory; B2B: Voluntary | B2G: Central government suppliers; B2B: No mandate | B2G: Enforced awaiting roll-out<br><br>B2B: Voluntary |
| | Norway | B2G: Mandatory; B2B: Planned 2028 | B2G required since 2012; B2B consultation underway for 2028 mandate | B2G: Mandatory; B2B: Planned mandatory | B2G: Public suppliers; B2B: No mandate | B2G: Enforced; B2B: Voluntary |
| | Poland | B2B: Mandatory from 2025 | KSeF e-invoicing for all VAT-registered | Mandatory | All VAT-registered businesses | Legislation passed; rollout from Feb 2026 |
| | Portugal | B2G: Mandatory (phased); B2B: Voluntary | B2G mandate for SMEs from Jan 2025; QES for B2B PDFs required from 2026 | B2G: Mandatory (phased); B2B: Voluntary | B2G: Large entities since 2021; SMEs from 2025; B2B: No mandate | B2G: Phased rollout;<br><br>B2B: Voluntary; QES: delayed to January 2026 |
| | Spain | B2G: Mandatory; B2B: Planned | B2G since 2015; B2B mandate approved, phased | B2G: Mandatory; B2B: Voluntary (until law) | B2G: Public >8k; B2B: >8m turnover: 1yr after law; others: 2yrs | B2G: Enforced; B2B: Awaiting royal decree |
| | Sweden | B2G: Mandatory; B2B: Voluntary | B2G mandatory since 2019; B2B voluntary | B2G: Mandatory; B2B: Voluntary | B2G: Public suppliers; B2B: No mandate | B2G: Enforced; B2B: Voluntary (actively being reviewed by government) |
| | Switzerland | B2G: Mandatory (federal); B2B: Voluntary | B2G for federal contracts >CHF5k; B2B voluntary | B2G: Mandatory; B2B: Voluntary | B2G: Federal suppliers (thresholds); B2B: No mandate | B2G: Enforced; B2B: Voluntary |
| | UK | B2G: Mandatory (NHS); B2B: Consultation | B2G required for NHS; B2B consultation 2025 | B2G: Mandatory; B2B: Voluntary | B2G: NHS suppliers; B2B: No mandate | B2G: Enforced; B2B: (actively being reviewed by government) |

# Appendix: Global progress

| Continent | Country | Type of Mandate (B2G/B2B) | Major Recent Changes | Voluntary or Mandatory | Who Must Comply & Thresholds | Current Status |
|---|---|---|---|---|---|---|
| **Oceania** | Australia | B2G: Mandatory (federal); B2B: Voluntary | B2G via Peppol since 2022; B2B voluntary | B2G: Mandatory; B2B: Voluntary | B2G: Federal suppliers; B2B: No mandate | B2G: Enforced; B2B: Voluntary (actively being reviewed by government) |
| | New Zealand | B2G: Mandatory (federal); B2B: Voluntary | B2G via Peppol since 2022; B2B voluntary | B2G: Mandatory; B2B: Voluntary | B2G: Federal suppliers; B2B: No mandate | B2G: Enforced; B2B: Voluntary (actively being reviewed by government) |
| **South America** | Brazil | B2G/B2B: Mandatory | Full mandate, phased by sector/state between 2006 - 2018 | Mandatory | All VAT-registered businesses (sector-specific) | Fully enforced |
| **North America** | Canada | B2G: Encouraged; B2B: Voluntary | No federal mandate; CRA guidance | Voluntary | No mandate; guidance provided | Voluntary |
| | Mexico | B2G/B2B: Mandatory | CFDI e-invoicing mandatory for all | Mandatory | All taxpayers | Fully enforced |
| | USA | B2G: Mandatory (Federal); B2B: Voluntary | Federal mandate since 2018; B2B voluntary | B2G: Mandatory; B2B: Voluntary | B2G: All federal suppliers; B2B: No mandate | B2G: Enforced; B2B: Voluntary |