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# The global e-invoicing and tax compliance report: Watch the tornado!

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The global e-invoicing and tax compliance report: Watch the tornado!

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## 0.    Executive Summary

'The global e-invoicing and tax compliance report: Watch the tornado!' provides a comprehensive analysis of the current landscape and future outlook of electronic invoicing and related digital trade practices. Authored by pioneers Marcus Laube and Bruno Koch, this edition delves deeply into the shifts and innovations shaping this space, driven significantly by advancements in technology and regulatory requirements, with the global volume of invoices processed electronically poised to increase dramatically. It is within this context that we have titled our report 'Watch the Tornado,' highlighting the necessity for both users and solution providers to stay informed and prepared for these evolving trends and findings:

+   **Market Growth**: The e-invoicing market is expected to see substantial growth, with projections indicating a surge in both adoption rates and market value driven by the need for greater compliance and efficiency in business transactions. As of 2024, the market anticipates handling approximately **560 billion invoices annually**. Presently, around **125 billion** of these invoices are transmitted electronically. The current market value stands at $ 8.9 billion and is projected to ascend to approximately **$ 23.7 billion by 2028**.

+   **Regulatory Impact**: Tax authorities globally are increasingly adopting electronic invoicing as a strategic measure to combat tax evasion. Many are implementing **Continuous Transaction Control (CTC) models** that facilitate real-time or near-real-time transaction processing and auditing. Initiatives such as 'VAT in the Digital Age' (ViDA) in Europe, along with the widespread adoption of Peppol specifications in Asia, suggest a growing preference for **four and five corner models**, with the latter to enhance compliance and operational efficiency simultaneously. These implementations are frequently coupled with **B2B mandates** that require electronic invoicing. Looking ahead, it is likely that these requirements will expand to include additional business documents and Environmental, Social, and Governance (ESG) criteria.

+   **Integrated Digital Trade (IDT)**: Beyond electronic invoicing, the shift toward Integrated Digital Trade (IDT) represents a comprehensive strategy for automating both business transactions and financial operations. This movement is bolstered by governmental policies that mandate the incorporation of additional business documents and encompass processes such as **payment, invoice financing, electronic procurement, and tax automation**. The approach to adopting IDT varies based on distinct value propositions and differs significantly between small and medium-sized enterprises (SMEs) and large corporations. While **SMEs** may focus more on integrating financial processes and tend to respond primarily to imminent regulatory mandates, **large enterprises** are likely to initiate projects proactively with an emphasis on automating supply chain processes.

+   **Technology Integration**: Emerging technologies such as **Artificial Intelligence (AI)** are increasingly integrated with e-invoicing systems, offering new efficiencies and capabilities. Leverage AI and blockchain to not only comply with regulatory frameworks but also to gain a competitive edge through improved transactional accuracy and security.

The e-invoicing landscape is rapidly evolving, underscored by technological advancements and significant regulatory changes. Organizations that adapt quickly to these changes, leveraging new technologies and models, will benefit from increased efficiency, compliance, and competitiveness in the global market. This report serves as a vital tool for understanding and navigating the complexities of e-invoicing and Integrated Digital Trade as they become standard practices worldwide.

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# 1. Introduction

## 1.1 The purpose of the Report

Bruno Koch and Marcus Laube are distinguished pioneers in the realm of electronic invoicing from its inception. Since 1999, Bruno Koch has evolved billentis into the premier global consultancy specializing in electronic invoicing and tax compliance, authoring all preceding reports for the organization. Concurrently, Marcus Laube has established and overseen a variety of internationally operating service providers, in addition to leading pivotal industry associations. Both have contributed their expertise to numerous e-invoicing committees, including those affiliated with the European Commission. Marcus Laube has recently assumed ownership of billentis, with Bruno Koch continuing to contribute to the production of this report.

Motivated by favourable market reception, we are pleased to announce the release of the latest edition of our report on electronic invoicing and tax compliance. Since our previous publication in 2019, there has been a significant shift in the market landscape. The demand for tax compliance has accelerated the transition towards universal electronic invoicing, a development expected to occur in the near term. Furthermore, the range of solutions is expanding beyond electronic invoicing to encompass Integrated Digital Trade, encapsulating the entire spectrum of transactions between buyers and sellers. This progression is increasingly influenced by emerging technologies, notably Artificial Intelligence, alongside growing considerations for Environmental, Social, and Governance (ESG) factors. While initially predominant in Latin America and Europe, this trend is now gaining momentum across Asia, Oceania, and Africa.

As the industry moves towards universal electronic invoicing, many organizations continue to search for solutions tailored to their unique needs within a market burgeoning with service providers and solutions. It is within this context that we have titled our report 'Watch the Tornado,' highlighting the necessity for both users and providers to stay informed and prepared for these evolving trends. In this critical phase, accessing current information and guidance for selecting the most suitable solution and service provider is paramount.

## 1.2 Methodology

The authors possess extensive experience in the e-invoicing sector since 1997, pioneering two of the initial cloud-based e-billing and e-invoicing services in Europe and managing leading industry associations. They have served as independent consultants crafting business strategies, Requests for Proposals (RFPs), system assessments, and numerous technical and marketing plans for major invoice issuers and recipients, government entities, integrators, and solution and service providers. Throughout this period, they have continuously gathered critical data on pertinent markets, regularly disseminating their findings in industry reports.

The report draws on a comprehensive base of sources, including:

+ Data from public domains, meticulously compiled from thousands of resources over the years and refined for accuracy.
+ Precise official statistics, especially from countries with advanced electronic invoicing and tax reporting frameworks.
+ Country and sector-specific surveys.

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+ Data from significant invoice issuers and recipients across various sectors like tele-communications, utilities, financial services, public sector, healthcare, and retail, obtained from online publications or corporate responsibility and Environmental, Social, and Governance (ESG) reports.
+ Information from leading service providers and aggregated industry association data.
+ Market research conducted by external parties, representing insights from over 20,000 enterprises and 15,000 consumers.
+ Verification of critical data through customer/provider confirmations and analysis of numerous corporate responsibility reports, often validating the share of paperless billing and invoicing.
+ Extensive interviews with regional specialists.
+ Direct insights from over 200 client consulting engagements across more than 50 countries.
+ An amalgamation of the aforementioned data sources.

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## 2.    Market Characteristics

### 2.1    E-invoicing and Beyond – Terms and Definitions

#### 2.1.1    Definition of E-invoicing

The term 'e-invoice' is used within the Business-to-Business (B2B) and Business-to-Government (B2G/G2B) contexts, specifically referring to the electronic transmission of invoices between suppliers and purchasers, without addressing data exchanges with tax authorities for reporting and control objectives.

In the **Western hemisphere**, e-invoicing signifies the digital transmission of invoices directly between suppliers and purchasers across various sectors, including businesses (B2B), public administrations (B2G), and consumers (B2C). In the United States, a distinction exists between 'e-invoice' for B2B transactions and 'e-bill' for consumer transactions.

European Union (EU) legislation provides a comprehensive definition for the B2B context, involving the electronic issuance and receipt of Value Added Tax (VAT) compliant invoices. It mandates the archival of e-invoices in their original digital format, even if a printed version is produced subsequently. This definition is widely accepted and includes digital invoices, primarily in PDF format. For B2G transactions, only structured formats qualify as e-invoices under EU directives. The definition for B2B transactions may evolve with the implementation of the 'VAT in the Digital Age' (ViDA) project.

In **Latin America**, the term 'e-factura' or 'e-boleta' refers to the digital transmission of sales invoice data to tax authorities.

In **Asia**, practices vary, with Singapore and some countries aligning with the Western definition, while others use the term for reporting sales data (e-tickets, e-receipts) to tax authorities. In countries like India, Indonesia, and China, e-invoicing is used for VAT invoice registration.

The future of e-invoicing is moving towards standardized structured data use across B2B and B2G mandates, aiming to standardize invoice exchange methods.

The term 'e-billing' refers to the electronic generation of bills for consumers (B2C) and government-to-consumer (G2C) transactions. Numerous stakeholders employ the terms 'e-invoicing' and 'e-billing' interchangeably, without distinguishing between them based on the recipient segment. Instead, they utilize one of these terms universally for all electronic invoice transactions.

billentis defines 'invoice'/'bill' and 'e-invoice'/'e-bill' for global statistical and predictive analysis. Legal definitions may vary, but excluded from the e-invoice category are:

+   Financial documents that do not reflect a commercial transaction, accompanied by a 'request for payment', such as bank statements and waybills.
+   Invoices that are entirely digital but do not meet tax compliance requirements due to deficiencies in integrity, authenticity, and readability.
+   'Electronic invoices', supplemented by legally significant paper-based summary invoices as components of the Electronic Data Interchange (EDI) ecosystem, are scanned, printed, or archived by recipients. In instances where only the paper version is maintained as the 'new' de facto original and assumes the role of the primary document.
+   Asymmetric e-invoicing, where buyers retain the right to request a printed version of the invoice, which shall then be recognized as the legally valid original invoice.
+   Bulk of paper invoices, despite the concurrent electronic transmission of invoice data to tax authorities or trading partners.

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There are three recognized types of e-invoices: legal invoices, core (VAT-/Sales tax (ST)) invoices, and commercial invoices. Legal invoices meet tax compliance requirements with mandatory fields and authentication, preserved as the original valid invoice. Core invoices comply with tax and trade requirements, supporting automated processing. Commercial invoices, designed for specific industries, accommodate extensive data fields to enable process automation.
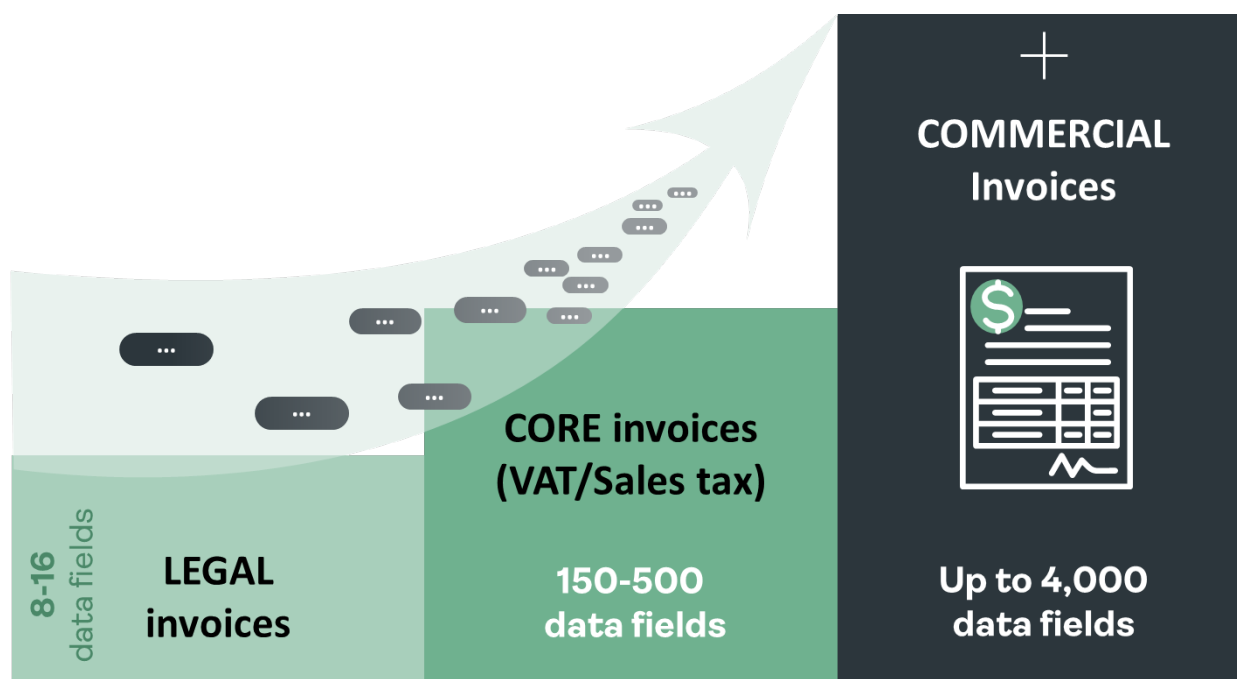


**Legal invoices:** Electronic invoices, which mandatorily include 8 to 16 essential fields along with the authentication of both the issuer and recipient, are exchanged between two entities acting as supplier and buyer. These digital, tax-compliant invoices serve as the legitimate original invoices. The exchange occurs directly between the entities, through service providers, or via platforms offered by tax authorities. These electronic invoices are meticulously preserved as they constitute the sole original invoices recognized by tax authorities and auditors for compliance purposes.

**Core invoices**: Compliant with the standards for VAT, Sales tax and trade invoicing, including the European Norm for EU-wide B2G electronic invoicing. This entails a comprehensive format featuring 150 to 500 fields to facilitate automated processing. Such invoices are commonly generated by accounting/ERP systems and serve as the foundation for electronic tax reporting, e-invoicing, and the automation of business processes.

**Commercial invoices**: The Universal Business Language (UBL) standard encompasses approximately 4,000 distinct data fields exclusively for invoicing purposes, leading to the development of UBL subsets tailored to particular user groups, such as NES, OpenPeppol, and UBL-TR. Industries such as healthcare and transport logistics heavily rely on these specialized commercial invoices to achieve full automation of their processes.

### 2.1.2   From Tickets to Core Invoices

In today's global market, customers across the majority of nations can seamlessly acquire products or services at the point of sale (POS) without undergoing extensive formalities. Upon completing a transaction, customers receive a receipt, which notably omits the inclusion of the customer's name. The transfer of electronic data to customers presents challenges, rendering automated processing complex or unfeasible.

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For transactions surpassing several hundred euros in value, regulatory requirements in many jurisdictions necessitate customer authentication, incorporating their details into the payment confirmation. Consequently, the receipt is enhanced with the customer's primary information, elevating it to the status of a standard invoice.

**Core Invoice**

Customer authentication number & address

**150+ fields in practice** for automated processing

**8-16 of them mandatory**

**Ticket, Receipt**

Customer authentication number

**5-7 mandatory fields**

**Ticket, Receipt**

Anonymous

**4-6 mandatory fields**
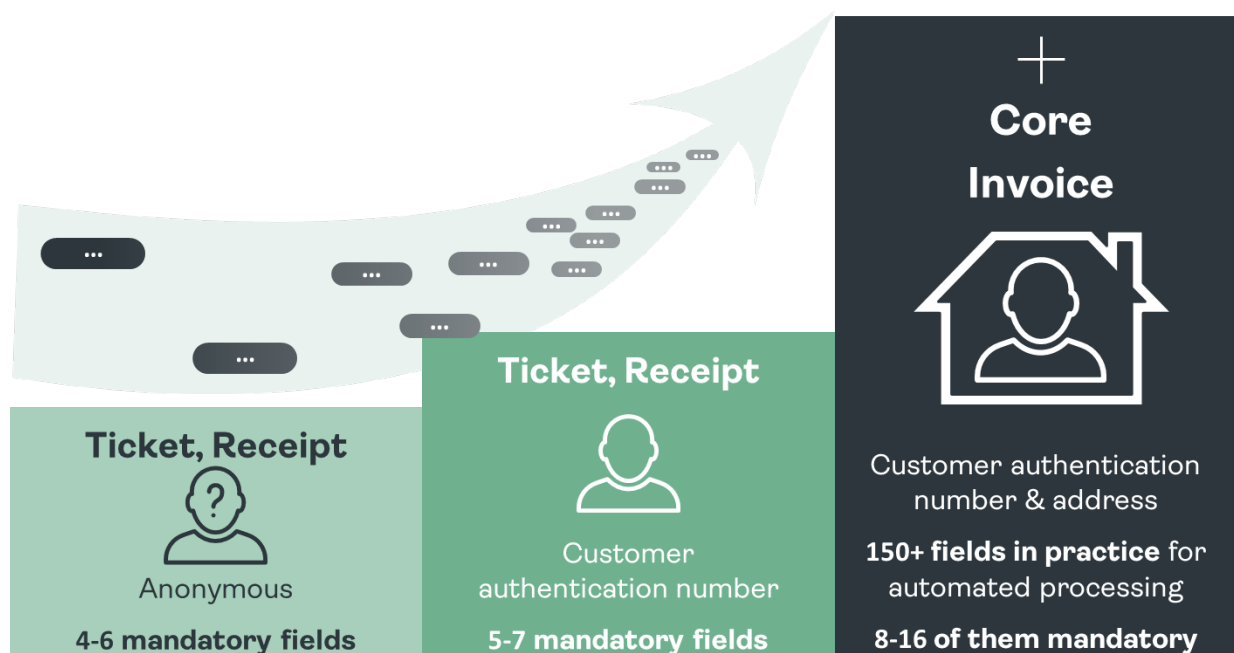
Reflecting on developments a decade prior, it is observed that customers in certain forward-thinking countries, such as Chile, were incentivized through financial means (e.g., a more favourable VAT rate) to voluntarily disclose their identity at the POS.

The authors anticipate a trend towards stricter regulations on anonymous POS transactions as a strategy to combat tax evasion. This could manifest through legislative amendments lowering the threshold for anonymous purchases. Additionally, advancements in mobile technology, facilitating easy merchant and customer authentication via QR codes or applications embedding identity information, are likely to be a contributing factor. Indications are that a significant portion of invoices, in a broader legal context, will transition to core invoices. This shift is poised to enhance the electronic exchange and automated processing of these invoices.

+ **Receipts and tickets, previously issued anonymously, are increasingly likely to incorporate customer authentication data at the POS or during transactions using mobile devices. This will enable electronic transmission to customers, integration into accounts payable (AP) systems, and facilitate their automatic processing.**

It is crucial to clearly differentiate between invoices and receipts (which include payslips and tickets), as both categories play instrumental roles in recording transactions for goods and services. Invoices and receipts generally share similar details, such as the transaction value, applicable sales tax, and discounts.

Examples of 'invoice-like documents and messages' include:

+ Invoice data sent to tax authorities for validation or audit purposes, covering electronic reporting and VAT/Sales tax filings.
+ Digital counterparts to conventional fiscal printers that produce payment receipts, including electronic receipts generated at points of sale (e.g., retail stores, dining establishments, ticket counters) and submitted to tax authorities for validation or audits, especially in regions like Taiwan and certain Latin American countries.

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The projection that electronic Point of Sale (POS) systems and mobile invoicing will become increasingly prevalent is supported by several factors. These technologies enhance convenience for consumers and play a critical role for businesses in managing transactions at the POS (including business meals, office supplies, and fuel for company vehicles) and enabling purchases via mobile apps (e.g., for train and flight tickets, parking fees). Moreover, tax authorities are progressively requiring customer authentication for even minor transactions, integrating such data into payment confirmations. This shift is crucial for businesses to accurately reclaim taxes or allocate these expenditures within their accounting systems. The move from traditionally anonymous transactions to digital invoices facilitates their seamless integration and processing within customer systems. This is why in the future it will be less and less possible to differentiate between classic e-invoices and personalized e-receipts in a global context.

### 2.1.3 E-invoicing versus E-reporting

Although invoice-relevant data can be exchanged using the same technical platforms, and following the same schemes and models, it is useful to distinguish between e-invoicing and e-reporting to tax authorities. Mainly in African and Asian publications, e-reporting from cash registers and virtual printers to tax authorities is often translated into English using the term 'e-invoicing'. However, we use the term differently in this document.

**E-invoicing**: Both the supplier and the buyer have finally an electronic invoice that represents for tax purposes the invoice original. These invoices include the full content. In practice, it may be one document, or several documents, one of which contains all the core information relevant for tax purposes, with separate extensions that are more relevant to suppliers and buyers.

In several jurisdictions, tax authorities mandate that suppliers utilize specific invoice numbers (termed 'folio') they issue. Subsequent to generating these invoices, suppliers in certain regions are obligated to submit comprehensive invoice details to the tax authorities and, either directly or indirectly, to the purchasers. In some cases, tax authorities demand this information prior to the dispatch of goods. The tax authority or certified service providers then scrutinize the data, providing suppliers with electronic validation codes as confirmation.

**E-reporting** to tax authorities: E-reporting includes reports of business transactions, extracts of invoices, declarations of any other fiscal data, and tax records. It is devised to speed up processing of tax statements and returns. In one application example, only the supplier has finally an electronic invoice, but sends the original invoice in paper form to the buyer. In another scenario, the parties exchange just an extract of the invoice electronically (which is suitable for reporting and tax audit purposes).

Certain countries mandate the submission of invoice summaries in any format or specifically as the Standard Audit File for Tax (SAF-T). In addition to invoicing details, suppliers are obliged to disclose additional data of fiscal significance.

### 2.1.4 From E-invoicing to Integrated Digital Trade

In nations with Value-Added Tax (VAT) frameworks, invoices are paramount among all business communications. Valid invoices are essential for the reclaiming of VAT and the consideration of purchasing costs in financial accounting. Consequently, the emergence and sustained relevance of terms such as 'e-invoicing' and 'e-billing' were natural developments, further solidified by legal definitions. Historically, many solution providers specialized exclusively in e-invoicing functionality, yet the demand has grown for support across a broader spectrum of messages within both the financial and physical supply chains. Notably, messages pertaining to electronic tax reporting are often directly associated or, ideally, synonymous with these business communications. In the context of digitalization, e-invoicing constitutes merely a segment of a comprehensive landscape, necessitating an integrated approach to leverage its full potential.

The automation of procurement processes, financial processes and tax reporting has historically progressed with a degree of independence. At its least effective, this segmentation results in isolated processes and data silos. However, the private sector has made strides in automating the financial and physical supply chains, evidenced by the exchange of up to 160 different types of electronic business messages between suppliers and buyers.
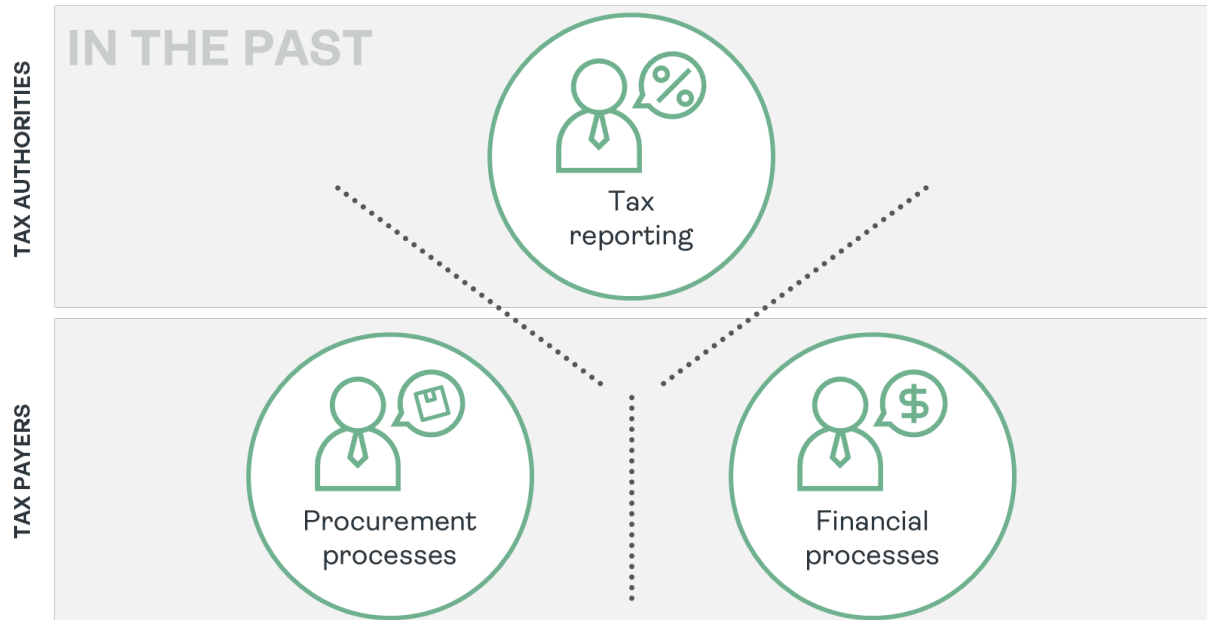


Notably, tax authorities in Asia, Latin America, and increasingly in Europe, mandate the submission of electronic data mirroring the business communications transacted between suppliers and buyers.
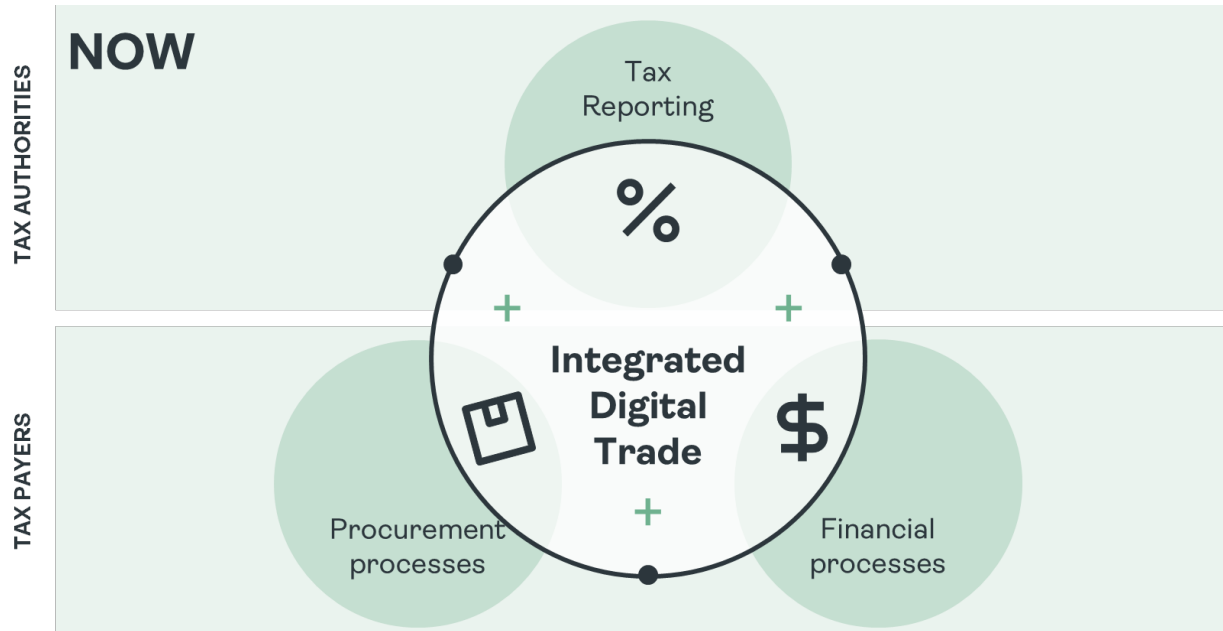


The convergence of these three domains is progressively evident. Despite their individual evolutions, processes and communications between trading parties and tax authorities often proceed in parallel. A harmonized approach to digitalization is achievable only through collaborative efforts among suppliers, buyers, and tax authorities to design and implement a unified model, paving the way for Integrated Digital Trade.

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**This shift signifies the emergence of a new market segment, termed Integrated Digital Trade, transcending previous definitions such as Financial Supply Chain, EDI, Order-to-Cash, Procure-to-Pay, and Business Automation. This segment represents a holistic approach to digitally facilitated trade, underscoring the evolving landscape of tax compliance and administration.**

### 2.1.5 How Tax Authorities Drive Integrated Digital Trade

This comprehensive strategy is primarily propelled by tax authorities, aiming to combat tax evasion through extensive data collection. This method embraces the Big Data concept, focusing on gathering critical data on all pertinent matters. Currently, the universal practice involves the acquisition of general ledgers and other audit-related data, which, in most instances, is mandated only after transactions have concluded. Although paper-based reporting remains prevalent, its impact on curbing tax evasion appears negligible. The exploitation of Big Data is emerging as a pivotal method in the fight against tax evasion.

The pivotal role of invoices, as they furnish tax authorities with the most comprehensive data, marks a significant phase in this transformation. This evolution mandates that organizations exclusively exchange invoices in a digital format, with the obligation to submit these invoices to tax authorities either before or subsequent to goods dispatch, adhering to the Continuous Transaction Control (CTC) model. The employment of e-audit and data forensics techniques enables tax authorities to identify discrepancies more efficiently, leading to a noticeable reduction in tax evasion in several nations.

However, tax evasion avenues still exist, such as through over-the-counter sales or inaccurate declarations of salaries. In response, advanced nations are striving to fully digitalize the communication loop between taxpayers and tax authorities, ensuring that all fiscally relevant data is electronically transmitted. This approach paves the way for real-time or near-real-time audits to become standard practice.

This digital transformation encompasses approximately 25 to 30 fiscal documents, now increasingly required to be electronically exchanged with tax authorities, business partners, and employees. These documents include:

+ invoice extracts
+ full-content invoices
+ POS and mobile invoices
+ Corrections, cancellations
+ credit/debit notes
+ financing
+ payments
+ purchasing, procurement
+ human resources, salary statements
+ transport and logistics
+ inventory
+ export/import documents
+ VAT/Sales tax declarations
+ bank statements
+ etc.

Furthermore, documents and information related to transport, delivery, customs, and manufacturing are anticipated to become integral to electronic reporting. Globally, several countries are advancing towards integrating these practices, although the extent and integration level vary. The EU's Excise Movement and Control System (EMCS) [1], Brazil's pre-shipment

invoicing requirement [2] and Kazakhstan's Virtual Warehouse Module exemplify strides to-wards merging the virtual and physical tracking of goods [3]. Russia, distinctively, focuses on the traceability of pharmaceuticals to prevent counterfeiting rather than tax evasion.

## 2.2     Tax Driven Continous Transaction Control Models (CTC)

### 2.2.1    Tax Gap as Main Accelerator for Digital Reporting Requirements

Early days of e-invoicing have been pre-dominantly influenced by the private sector seeking to achieve commercial benefits from business automation. Nowadays this has turned into a gov-ernment driven market development. The main driver for governments to impose new legal and tax related requirements is what is called the VAT/Sales Tax Gap.

The Value Added Tax (VAT) or Sales tax (ST) gap, representing the difference between the ex-pected tax revenue and the amount actually collected, has long been a concern for govern-ments worldwide. As countries grapple with the challenge of combating tax evasion and im-proving revenue collection, the digitalization of fiscal documents emerges as a potent solution. This way the tax gap serves as a primary catalyst for accelerating the digitalization of fiscal documents.

The digitalization of fiscal documents involves the transition from paper-based records to electronic systems, making use of technology to streamline processes and improve accuracy. In the context of VAT/ST, this means implementing digital platforms for invoicing, reporting, and tax compliance. The inherent benefits of digitalization include real-time data access, re-duced administrative burdens, and enhanced traceability, making it a powerful tool in the fight against the VAT/ST gap. This development led to the adoption of Digital Reporting Require-ments (DRR).

In countries employing VAT systems, an invoice serves as a crucial document for substantiat-ing tax compliance. Due to historical practices, many of these nations still adhere to Periodic Transaction Controls (post-audit controls), involving tax audits conducted up to several years after transactions occur. This approach presents several drawbacks for both taxpayers and tax authorities, contributing significantly to tax evasion. Consequently, it is deemed outdated. Thus, a swift transition towards real-time or near-time Continuous Transaction Controls (CTC) models is underway. Under this framework, organizations are mandated to report in-voices to tax authorities or, at the least, furnish key invoice details electronically. Initially adopted by Latin American, Asian, and select European countries grappling with substantial tax collection challenges, the CTC model is poised to gain global traction, already impacting numerous international businesses. While it may become the prevailing standard, uniform im-plementation across all nations is unlikely.

**Causes of the VAT/ST Gap and possible digital solutions to bridge the gap**

The VAT/ST gap is a crucial metric that reflects the effectiveness of a tax system in capturing the revenue it is entitled to. This gap arises from various factors, including tax evasion, fraud, administrative errors, and inadequate enforcement. Traditional methods of tracking and col-lecting tax have proven insufficient, leading governments to seek innovative solutions to bridge the gap and enhance fiscal transparency.

To gain insights into current and prospective digital reporting requirements, it is valuable to scrutinize areas where a tax gap may arise. The subsequent table also delineates digital solu-tions that possess the potential to substantially mitigate the gap.

| Cause | Digital solution |
|---|---|
| + Cash payments without receipts and tax declaration | + Require non-cash payments above a certain amount and/or withdraw bank-notes from circulation if they exceed a certain amount. |

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| Cause | Digital solution |
|---|---|
| | + Require certified cash registers that are linked to the tax authorities to submit real-time reporting.<br>+ Encourage or require customers to demand receipts / invoices.<br>+ Electronic POS and mobile invoicing via CTC models. |
| + Carousel fraud and invoicing between phantom partners, or involved parties winding up before tax audit | + Require e-invoicing.<br>+ Require real-time lookup routines to make sure that all trading parties are registered in the national business directory.<br>+ Apply CTC models. |
| + Invoicing using wrong amounts | + Require e-invoicing via CTC models.<br>+ Artificial intelligence to detect wrong amounts. |
| + Goods are not supplied after an invoice has been issued | + For physical supplies: Digital link between the virtual and physical world; transport documents shall be valid only with evidence that transported goods have been declared with the tax authorities. Digital inventory reporting between businesses and tax authorities. |
| + Undeclared supplies and barter transactions | + Artificial intelligence; match between invoices, labour costs and inventory |
| + Smuggling and domestic fraud with physical supplies | + E-customs; digital trade facilitation; digital link between the virtual and physical world. |
| + Fictive employees and wrong labour costs | + Require electronic salary statements, which are exchanged using CTC models. |

## The impact of the VAT/ST Gap

To understand the development of e-invoicing in general, and the influence of the governments in particular, it may be helpful to understand the impact of the VAT/ST gap. Obviously, the economic impact of the VAT/ST Gap can vary significantly depending on the region, the size of the informal economy, the effectiveness of tax administration, and other factors.

The impact becomes very apparent looking at two key figures: The percentage of VAT/ST compared with the overall tax revenue and the actual gap that appears globally.
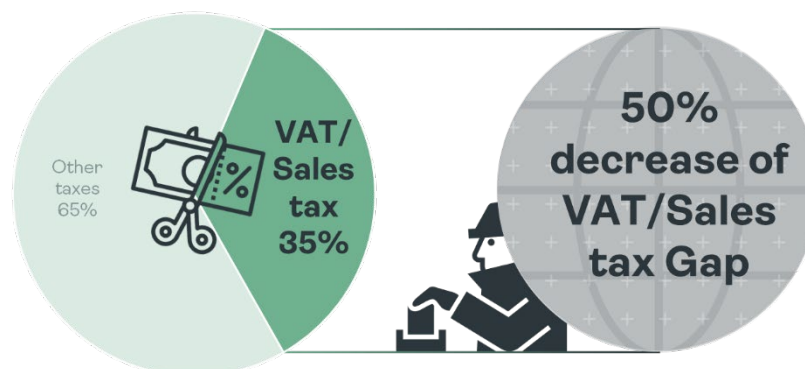
On a global scale, Value Added Tax (VAT) and Sales tax collectively account for approximately 34% of a country's overall tax revenue, making them the most significant taxes in nearly every nation.

The latest available data reveals a tax gap ranging from 20% to 30% of public revenue, which can be reduced by 50% by introducing tax compliance schemes. More recent figures from the European Commission highlight a notable decrease in the VAT gap over the past few years [4]. However, it is essential to note that this reduction is not indicative of a global improvement in tax collection but is primarily attributed to the economic downturn caused by the COVID-19 pandemic and the departure of the United Kingdom from the European Union, a significant economic player.



**VAT Gap Development EU**

| Year | Value |
|---|---|
| 2017 | 146 |
| 2018 | 143 |
| 2019 | 140 |
| 2020 | 99 |
| 2021 | 61 |

EUR million

| | | | | | |
|---|---|---|---|---|---|
| **EU** 60 603 | Belgium 2 530 | Bulgaria 347 | Czechia 1 362 | Denmark 1 780 | Germany 7 460 | Estonia 40 |
| Ireland 1 116 | Greece 3 231 | Spain 662 | France 9 552 | Croatia 461 | Italy 14 600 | Cyprus 197 |
| Latvia 225 | Lithuania 795 | Luxembourg 70 | Hungary 709 | Malta 345 | Netherlands -146 | Austria 883 |
| Poland 1 694 | Portugal 713 | Romania 8 996 | Slovenia 87 | Slovakia 871 | Finland 90 | Sweden 1 935 |

However, the evolution of the VAT gap in Italy indicates potential enhancements stemming from the implementation of Digital Reporting Requirements. Italy, as the inaugural European Union member state to adopt such prerequisites, has realized an annual increase in revenue amounting to approximately €6 billion.

Similar positive outcomes have been observed in Latin American nations:

+ Brazil experienced a noteworthy $58 billion (USD) surge in tax revenue by addressing gaps in invoicing and reporting.
+ Chile and Mexico successfully reduced their VAT gap by up to 50% [5].
+ Colombia achieved a 50% reduction in tax evasion through the application of similar models.

Drawing upon the insights garnered from Austria's case, billentis conducted a comprehensive analysis to compare the advantages of implementing a Decentralized Continuous Transaction Controls (DCTCE/five-corner) model versus natural market evolution. This investigation underscored that the economic gains for a nation adopting this model could be 5 to 11 times greater than the incremental VAT/ST revenue, attributable to efficiencies gained through business process automation among trading entities.

Countries embarking on this journey now have the distinct advantage of leveraging the valuable insights and experiences from trailblazing nations. This enables them to strategize from a comprehensive, top-down approach, engage in early collaboration with the private sector, and afford adequate preparation time for the private sector to effectively implement the model.

### 2.2.2   From Periodic to Continous Transaction Controls

Over the last few years and decades, the process of how taxpayers have to submit their data to the tax authorities has changed massively. The way in which VAT and other indirect taxes are transmitted is now also referred to as Digital Reporting Requirement (DRR). In turn, the trend has clearly developed from Periodic Transaction Controls (PCT), such as the SAF-T

standard or traditional VAT Return, in the direction of Continuous Transaction Controls (CTC). The main advantage for the tax authorities here is the faster availability of data and thus additional opportunities to rule out any VAT/Sales tax fraud as effectively as possible.



**Digital Reporting Requirements (DRR)**

| PERIODIC Transaction Controls | | CONTINUOUS Transaction Controls | | | |
|---|---|---|---|---|---|
| Aggregated | Detailed | Real-time Reporting | Clearance | Centralised Exchange | DCTCE/ 5 Corner |
| + VAT Return<br>+ Sales listing | + SAF-T<br>+ Transaction listing | + Invoice data/<br>+ Other data | + Pre/Post<br>+ Simplex/<br>+ Duplex | | + Simplex/<br>+ Duplex |
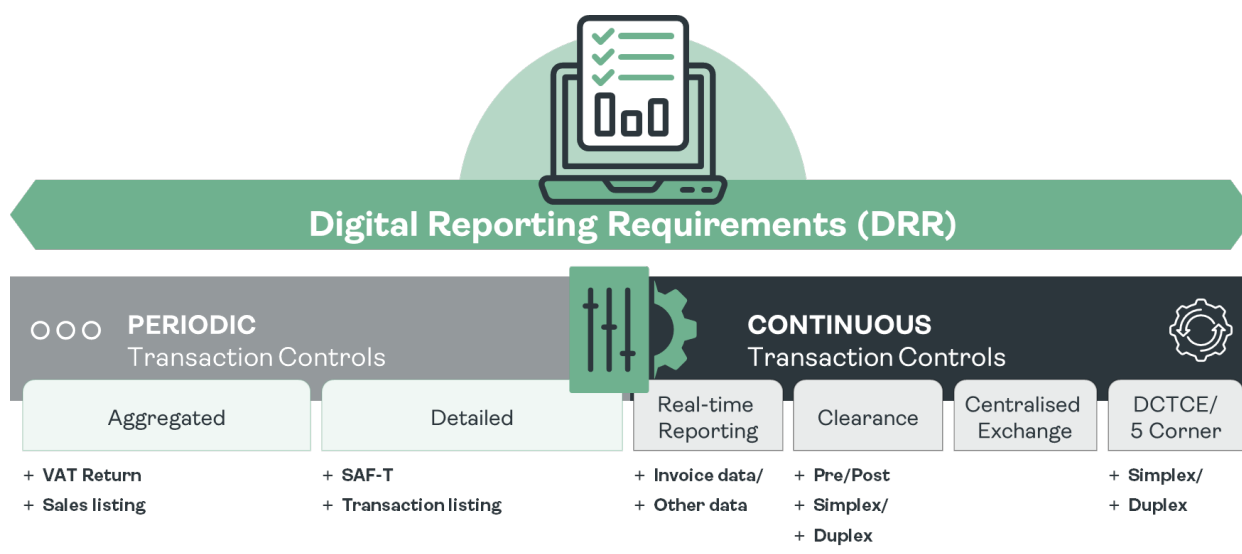
Starting from 2005 different models in different shapes and forms have developed and still exist within the marketplace [6]: Real-time Reporting, Clearance and Centralised Exchange. Based on initial experience, however, a model has now been developed that not only considers the benefits for the public sector, but also allows companies to equally benefit from optimized business processes. This latest generation model is known as the Decentralized CTC and Exchange model (5 corner) and is the basis for the planned introduction in France and the United Arab Emirates, for example.
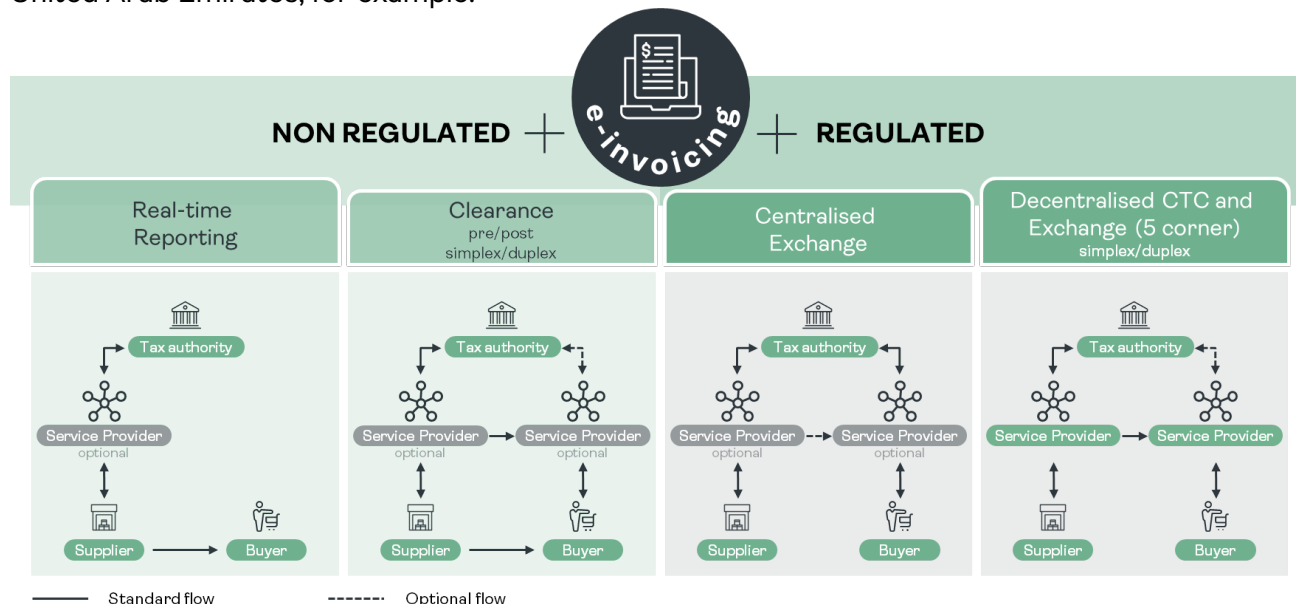


### 2.2.3  Real-time Reporting Model

Under this model, taxpayers are required to promptly report invoices to the tax administration or its designated government agency. This reporting occurs shortly after the issuance and exchange of invoices between trading parties.

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**Real-time Reporting**
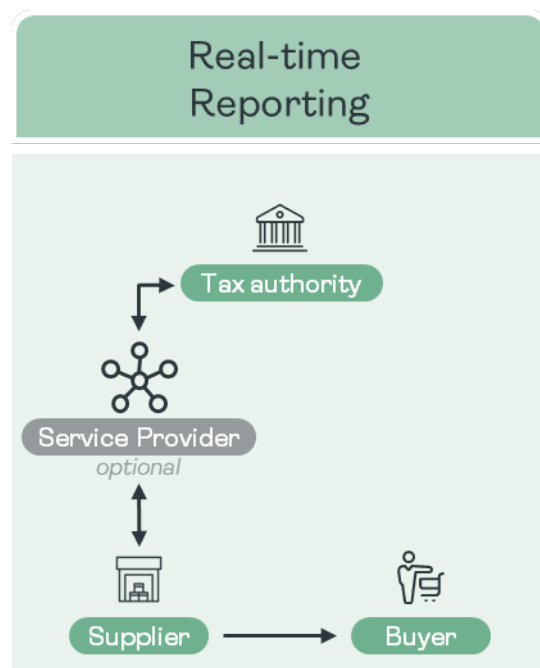


The framework of this model encompasses several key features aimed at streamlining the reporting process. Firstly, there is the establishment of a central processing platform by the tax administration. Secondly, the model mandates the utilization of accredited software solutions for access and processing on the platform. Thirdly, taxpayers are expected to submit either the entire invoice or a subset of invoice data within a specified timeframe of 24-72 hours post-invoice issuance, with flexible frequency intervals. Lastly, the system allows flexibility in the submitted dataset, enabling it to be generated fully from data within the invoice or requiring additional data not present in the invoice.

Beyond adherence to fiscal rules, the model recognizes the diverse landscape of invoicing practices. While invoicing is often not extensively regulated, economic operators may employ formatted electronic invoices or, more commonly, opt for humanly readable representations such as PDFs or traditional paper. The encouragement of e-invoicing is underscored by its potential for enhancing economic efficiency.

The adoption of this model poses unique challenges for taxpayers. It necessitates the implementation of distinct solutions and processes. Real-time reporting requires a separate system from that used for invoicing and/or e-invoicing. Additionally, the inclusion of data beyond the typical invoice content, such as financial accounting data, elevates both the initial investment cost and ongoing maintenance expenses.

While the model presents a significant stride toward modernizing tax reporting processes, stakeholders must carefully navigate the challenges associated with its implementation. Balancing the benefits of enhanced transparency and efficiency against the investment costs will be crucial for widespread acceptance and success.
Countries exemplifying this model include Hungary and South Korea.

### 2.2.4 Clearance Model

This framework streamlines the process of managing invoices, which includes checking for tax compliance and getting approvals before the invoice is sent to the purchaser. The framework is implemented in various configurations:

+ **Pre-Clearance and Post-Clearance**: Predominantly, invoices are submitted to the platform prior to being sent to the recipient, a procedure known as pre-clearance. Alternatively, some models involve submission post-approval by tax authorities, referred to as post-clearance.
+ **Simplex and duplex:** The simplex model involves solely the issuer of the invoice reporting to the platform. In contrast, the duplex model necessitates both the issuer and the recipient uploading the invoice to the platform.

**Clearance**
pre/post
simplex/duplex
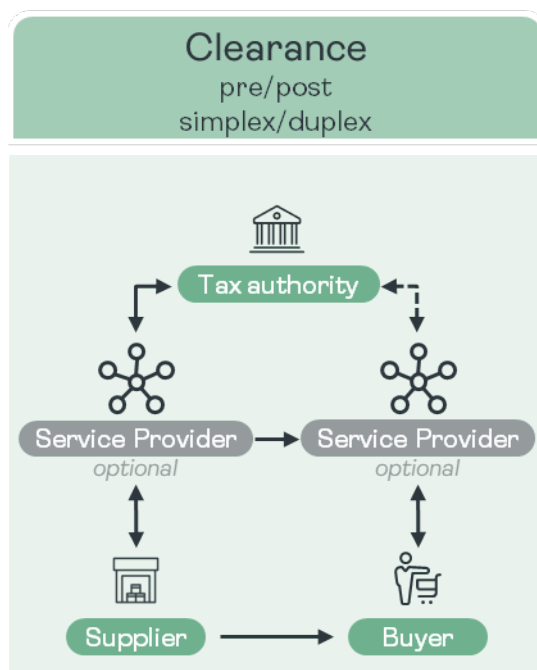
The process can be conducted through a single, centralized platform or by connecting with various authorized service providers. Invoices and related documents are exchanged directly among businesses or individuals, with or without the aid of service providers. It's notable that these activities aren't governed by government regulations.
A central feature of this arrangement is the creation of a main data storage and a platform by the tax authority. This authority requires taxpayers to use a specific, structured format for their invoices when reporting to the platform. Under this arrangement, the issuer of the invoice must first send it to the designated platform, which houses the main data storage, to get approval. This step verifies the tax compliance of the document. After approval, the issuer can send the approved invoice to the recipient. In a two-way version of this model (duplex), the recipient verifies the invoice on the same platform before payment. It's important to understand that these steps might change if the approval process is handled by authorized external providers.

There are various challenges and concerns for taxpayers in this system. First, the format required for approval doesn't set a standard for all invoices but is specifically designed for the Revenue Authority's requirements. Furthermore, there isn't an automatic way for businesses, like buyers and sellers, to work together smoothly, often leading to the use of different methods for exchanging documents.

Additionally, this model doesn't inherently improve the automation of managing accounts receivable and payable. To gain benefits beyond tax-related ones, it needs to be part of broader digital initiatives, including adopting electronic invoicing. From a business perspective, this process places significant operational burdens, particularly on the party issuing the invoice. As a result, this model is increasingly being replaced by more centralized or decentralized trading systems.

Countries exemplifying this model include Chile and Mexico.

### 2.2.5 Centralised Exchange Model

The Centralized Exchange model in e-invoicing designates a framework where a pivotal platform or exchange facilitates the transfer of electronic invoices between buyers and sellers, concurrently incorporating tax reporting features. This model is applicable for both Business-to-Government (B2G) and Business-to-Business (B2B) transactions.

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**Centralised Exchange**
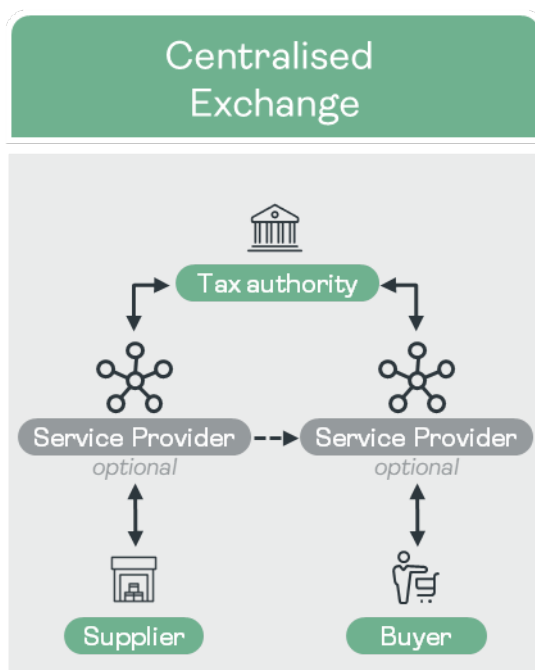
Within this paradigm, a central entity or platform operates as an intermediary among diverse business entities. Its primary responsibilities encompass the reception, processing, and transmission of invoice data, often requiring a uniform invoice format.

Vendors transmit their digital invoices to the central exchange platform through various methodologies, including direct upload, API integration, email, or third-party service providers. Upon receipt, the central exchange conducts a series of examinations, ensuring the invoice's format validity, tax regulation compliance, and adherence to specific business rules. Subsequent to these validations, the invoice is then relayed to the designated buyer, who may retrieve it via the platform through different channels or through service providers.

However, this model presents certain challenges. The reliance on a singular platform may lead to risks associated with system downtimes or potential monopolistic dominance. Businesses must also modify their systems for integration with the central exchange, including aligning with a data format that primarily serves the needs of tax authorities. This necessitates the risk of creating separate workflows between sellers and buyers to facilitate business automation and circumvent the constraints imposed by the invoice format. Furthermore, the model disrupts the trade cycle automation, as invoice processing occurs through the central platform, whereas other documents like orders or dispatch advices are managed directly between trading parties or their service providers.

Countries exemplifying this model include Italy, Serbia, and Turkey.

### 2.2.6 Decentralised CTC and Exchange Model (5 corner)

Recently, a new model has emerged that satisfies both the fiscal demands of tax authorities and the requirements for business automation: the Decentralised CTC and Exchange model. This model distinguishes itself by having data validation and exchange conducted by certified service providers, unlike other models. For certification, these providers must comply with a minimum set of technical and financial standards.

The primary document flow is managed between service providers using an established interoperability standard. A selected portion of the invoice, or possibly other business documents, is extracted and reported to the central tax authority platform using a specific standard. This data subset is transmitted immediately after the issuance of the business document, facilitating an uninterrupted trade cycle. Only certified service providers (referred to as corner two and three) have access to the tax authority platform, which serves as corner five.

Both sellers and buyers interact with their chosen service provider through a single, individual interface. This approach enables businesses to capitalize on their existing investments in e-invoicing and trade cycle automation technologies.

Additionally, the model is available in both simplex and duplex versions. In the simplex version, only sellers are required to report to the platform, whereas in the duplex version, buyers also need to report the received business documents.

The primary advantages of the five-corner model include:

Decentralised CTC and Exchange (5 corner) simplex/duplex
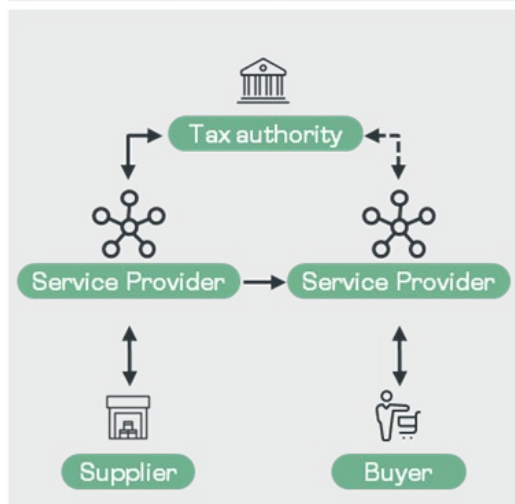
+ **Modular Deployment**: The model's various flows can be implemented in stages. The initial focus typically lies on the compulsory B2B and B2G exchange of business documents, utilizing the advantages of business automation. Once this is established and deployed, a separate flow between the certified service providers and the central platform can be introduced with minimal impact on business partners.

+ **Tax Control Customization**: Different countries may have varying requirements for the data they need under a tax reporting scheme. This might include different invoice data sets or additional trade cycle documents. In every scenario, only a subset of the document is used, ensuring data confidentiality and minimization. Changes in requirements do not impact the economic operators as the extraction is managed by the certified service providers.

+ **SME Friendly**: Considering the prevalence of SMEs in many countries, these models often incorporate low-cost or complimentary services mandated for service providers as part of the certification process. This typically relates to a specific number of invoices (e.g., up to 50 invoices per year) and is contingent on the company's size.

+ **No Single Point of Failure**: The main exchange of business documents occurs between certified service providers. The central platform receives only a minimal data set, once data quality and compliance are assured. Consequently, the platform only has to maintain and support a limited number of interfaces.

> These findings have significantly propelled interest among a wide range of nations towards adopting the Continuous Transaction Controls (CTC) framework, particularly the 5-corner model, in pursuit of achieving similar economic benefits. Consequently, it is anticipated that numerous countries worldwide will have established the 5-corner CTC model by 2030.

## 2.3    Private Exchange Models

Next to tax driven models there exist private exchange models that can be offered by service providers or used by companies in order to exchange business documents with their trading partners. Starting from early days of e-invoicing until today, there is a clear evolution of models in B2B/B2G beginning with two corner models up to four corner models.

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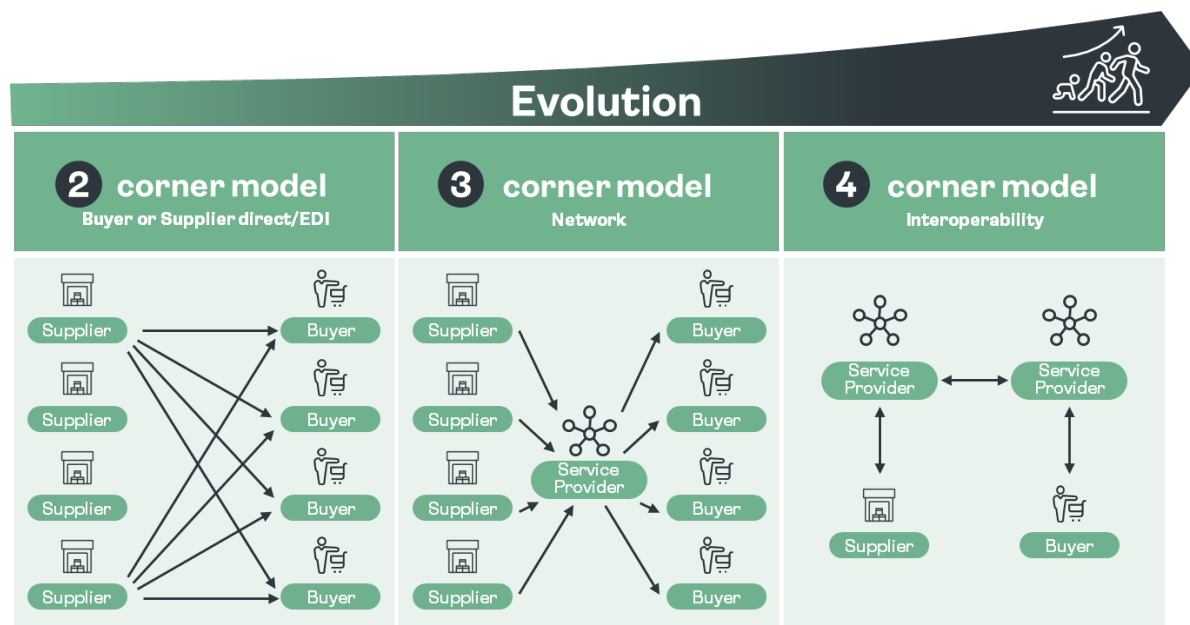


The main advantage for companies to use e-invoicing or Integrated Digital Trade is business efficiency and cost savings. Obviously for end users the focus is rather on automated payment transactions and avoiding the usage of different portals. As payment (and also financing) is getting more and more aligned with e-invoicing, related models emerge in the area of B2C.

### 2.3.1   2 Corner Model (Buyer or Supplier direct/EDI)

A **purchaser** incorporates an electronic invoicing and/or invoice management solution into their operational framework to receive electronic invoices through various channels:
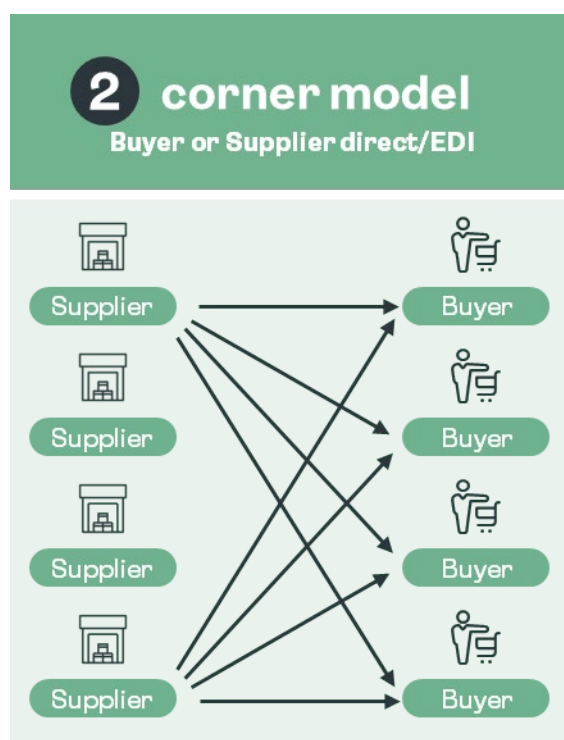


+ Receives invoices directly as a data stream for seamless integration into their Accounts Payable (AP) solution, primarily preferred for invoices from major suppliers.
+ Smaller suppliers input invoice data into a web template on the buyer's corporate invoice portal (webEDI). This data can be automatically processed and imported into the AP system.

This model is favored by larger organizations with a limited supplier base. It can also prove effective for smaller suppliers when electronic orders are exclusively transmitted to them (e.g., via an extranet portal). Numerous solution providers offer functionality to easily convert these electronic purchase order data into invoices for submission back to the buyer.

On the supplier side, an entity implements an e-billing/e-invoicing solution within its environment to disseminate electronic invoices through various channels:

+ Sends invoices to customers via email, Apps, etc.
+ Provides e-invoices on its customer portal, allowing customers to log in, view, and download them.

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The **supplier** direct model is particularly popular in high-volume industries such as telecommunications, utilities, card companies, and online shopping portals. Small businesses also prefer exchanging e-invoices directly with their trading partners. Due to their scale, these businesses may lack the capacity to host e-invoices on their own portals, opting instead to exchange them as PDF attachments to emails.

Over time, large organizations employing biller or buyer direct models have found that the marketing rollout is more challenging than anticipated, and the maintenance of their applications is ultimately too costly. Consequently, some service providers offer white-label services, operating under Software as a Service (SaaS) or Platform as a Service (PaaS) models. These providers manage the direct model on behalf of large issuers and recipients of invoices, handling software development, maintenance, and operations. Customers pay a fixed integration fee along with a volume- or time-based fee.

### 2.3.2 3 Corner Model (network)

The three-Corner Model emerges as a comprehensive framework for orchestrating e-invoicing processes among buyers, suppliers, and service providers. This model delineates the interactions and responsibilities of these three key entities within the e-invoicing landscape, offering a structured approach to facilitate seamless and secure electronic document exchange.
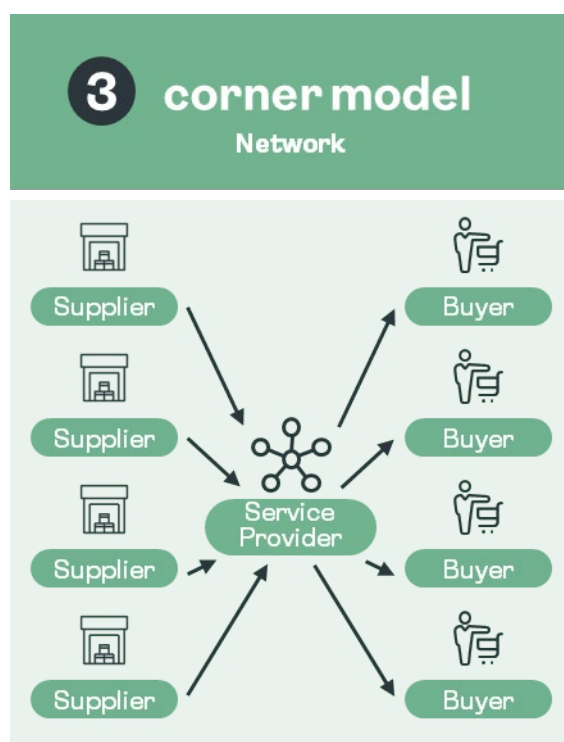


The **first corner** of the model represents the buyer, where initiation and reception of e-invoices take place. By leveraging a single interface to the service provider based on a defined data format and communication protocol, buyers can seamlessly integrate e-invoicing into their procurement systems, automating the invoice approval workflow and expediting payment processes. This happens regardless of how suppliers transfer their documents to the service provider. Central databases are usually used to ensure that incoming documents in various formats (PDF, XML, portals, etc.) are converted into the data format agreed with the recipient. Increasingly, the necessary data is extracted using Artificial Intelligence, meaning that traditional document scanning or data mapping is no longer required.

The **second corner** focuses on the supplier, responsible for generating and delivering e-invoices. The model emphasizes the importance of compliance with established e-invoicing standards, ensuring uniformity and interoperability across diverse business ecosystems. Based on one single interface to the service provider the model still caters for individual requirements imposed by large buyers. Suppliers benefit from reduced processing times, increased accuracy, and improved cash flow management through the adoption of the Three-Corner Model.

The **third corner** introduces service providers, acting as facilitators in the e-invoicing process. These entities play a crucial role in offering e-invoicing solutions, such as platforms for invoice creation, validation, and transmission. Intermediaries contribute to the scalability of e-invoicing adoption by providing a bridge between diverse systems and ensuring a smooth exchange of electronic documents. The service provider supports the main legal requirements, authenticity, and the end-to-end data integrity. An increasing number of operators offer additional services such as tax compliant long-term archiving.

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### 2.3.3  4 Corner Model (Interoperability)

The four-corner model operates as an exchange framework facilitating the transmission of invoice messages, with distinct service providers supporting both the sender and the receiver. This model can be viewed as an extension of the two and three-corner models, where service providers of the former models connect to each other, resulting in the establishment of a four-corner model.
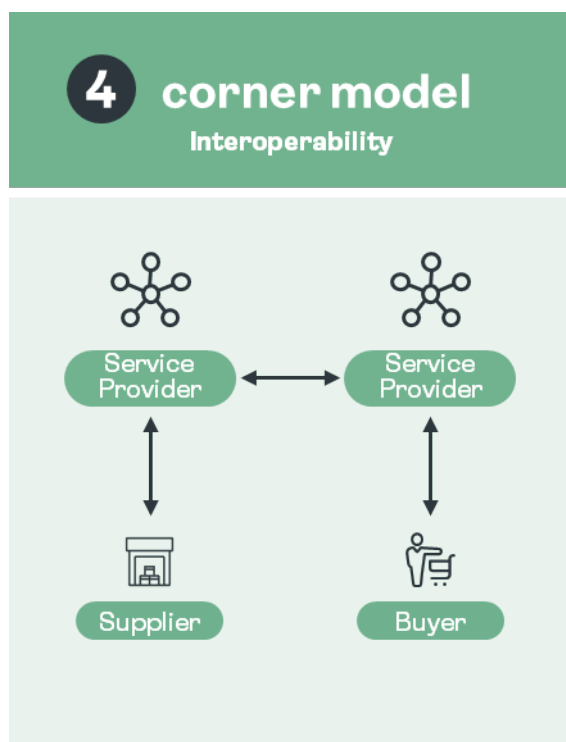
A notable advantage of the four-corner model lies in affording flexibility to both buyers and suppliers in selecting their preferred service providers. Simultaneously, it broadens the reach for each service provider and their customers, as engaging with an additional service provider can expand the electronic business partner network for a company.

To enable interoperability within a four-corner model, service providers must reach consensus on various standards, including legal agreements, service level agreements, data formats, protocols, and potentially commercial agreements. Such agreements can be bilateral or based on international standards. Currently, three prominent global associations—GENA (Global Exchange Network Association), OpenPeppol, and DBNA (Digital Business Networks Alliance), the latter recently started operations — are instrumental in setting these standards. The adoption of international standards streamlines the process, allowing seamless access to the entire customer base of another service provider through a single interface, whereas bilateral agreements may entail individualized setups for each customer.

As the global trend towards e-invoicing implementation continues, a surge in companies adopting these solutions is anticipated. This necessitates a value proposition focused on reducing complexity, consequently saving time and costs associated with achieving business process interoperability among trading partners. In response to this, OpenPeppol and GENA have initiated a collaborative incubation project to harmonize their existing interoperability frameworks, creating a unified framework for seamless business cooperation.

The Global Interoperability Forum (GIF) extends the concept of interoperability between diverse frameworks, including associations such as DBNA and ConnectONCE in the United States. This collaborative effort aims to establish common standards, fostering a more cohesive and efficient global business environment.

### 2.3.4  Consumer Driven E-invoicing Models

The various two, three, and four corner models are evidently well-suited for processing consumer (B2C) invoices as well. However, the advantages of employing electronic invoices for consumers differ significantly from those in B2B or B2G contexts. Rather than navigating diverse IT systems for invoice processing, consumers prioritize a convenient method for making payments and managing their invoices. The same principle applies to the receipt and storage of invoices, leading consumers to seek streamlined processes and avoid downloading or receiving invoices from disparate sources.

In response to these consumer-centric requirements, additional B2C models have emerged that closely integrate the e-invoicing process with payments, invariably involving payment and

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financial institutions. The role of these supplementary intermediaries is to bridge the gap between invoice senders and end users by incorporating information about the end user's bank account, which is typically not available to the sending party.

This process typically encompasses the following components:

+ Access to the intermediary platform for invoice senders is restricted to certified service providers.
+ End users receive e-invoices through existing Online Banking solutions to adhere to security and accessibility requirements.
+ Payments are facilitated without the need for re-entering payment information, leveraging the existing Online Banking process.
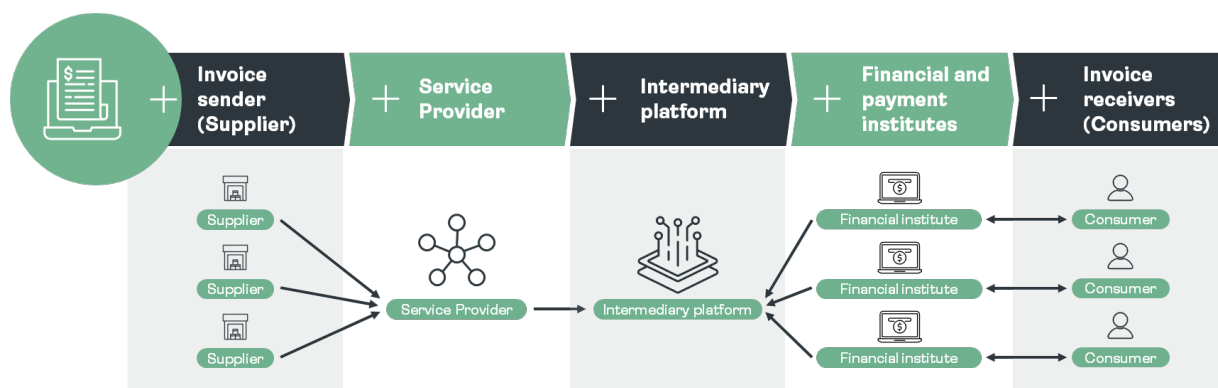


Comparable solutions have been deployed in Finland, Belgium, and Switzerland. The integration of the upcoming Request-to-Pay scheme by the European Payments Council into the solution remains uncertain. It is yet to be determined whether the new scheme possesses the capacity to supplant existing models.

The imposition of B2C mandates for e-invoicing is anticipated to influence the model. In an optimal scenario, this model could potentially be connected to a centralized tax administration platform, facilitating the seamless onboarding of B2C transactions.

## 2.4 Supporting Associations and Initiatives

### 2.4.1 Global E-invoicing Associations

#### 2.4.1.1 Global Exchange Network Association (GENA)

The Global Exchange Network Association (GENA), initially established as the European E-invoicing Service Providers Association (EESPA), is an international trade association that focuses on the digital exchange of data and documents related to business transactions. GENA's transformation from EESPA to its current form occurred in October 2023, reflecting a shift from a European to a global focus establishing local chapters in different regions worldwide. The organization aims to develop best industry practices and influence public policy, particularly in the realm of electronic invoicing.

GENA comprises over 100 member organizations, including service providers from various sectors such as network services, business outsourcing, financial services, technology, and Electronic Data Interchange (EDI) services. These members create a vibrant, competitive market, and do so by collaboration in the non-competitive space, striving to develop common standards and best practices. GENA provides a platform for its members to engage in networking, sharing knowledge, and developing interoperable systems for efficient electronic invoicing and data exchange.

The association's activities revolve around three main pillars: influencing business efficiency and innovation, informing members and the public about e-invoicing and related issues, and

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facilitating interaction and cooperation among members. GENA's governance structure includes an Executive Committee and various working groups focusing on interoperability, public policy, compliance, and other key areas.

Overall, GENA plays a critical role in advancing the efficiency and standardization of electronic invoicing and business document exchange on a global scale.

### 2.4.1.2 OpenPeppol

OpenPeppol is an organization that was established in 2012 to support the expansion and adoption of the Peppol specifications. These specifications were initially developed as part of a large-scale project funded by the European Commission to facilitate electronic procurement and invoicing processes across different European countries. The main goals of OpenPeppol and the Peppol specifications are:

+ Interoperability: Peppol specifications ensure that different eProcurement and e-invoicing systems can communicate with each other globally. This interoperability is crucial for efficient domestic and cross-border transactions.

+ Standardization: By standardizing the formats and protocols for electronic procurement documents (like invoices, purchase orders, etc.), Peppol simplifies the process of electronic transactions between businesses, and between businesses and governments.

+ Connectivity: Peppol provides a network (known as the Peppol Network) that enables the secure exchange of business documents. This network is supported by Peppol Access Points, which are service providers that connect users to the Peppol Network.

+ Governance: the OpenPeppol legal and compliance framework ensures that the Peppol specifications and Peppol Network facilitate a trusted and secure implementation of eProcurement and e-invoicing processes across different jurisdictions.

Beyond electronic invoicing, Peppol is increasingly relevant for the exchange of other electronic business documents, such as tax reporting, logistics, catalogues, and procurement. With the growing emphasis on digital transformation globally, the role of OpenPeppol in standardizing and promoting electronic business document exchange is increasingly important in the B2B and B2G sectors.

### 2.4.1.3 Digital Business Networks Alliance (DBNA)

The Digital Business Networks Alliance (DBNA) is an initiative aimed at enhancing the electronic exchange of business documents, particularly e-invoices, in the United States. Established in 2023, it represents a significant effort to address the challenges and inefficiencies associated with the B2B payments industry in the country, which has been heavily reliant on manual processes.

The core mission of the DBNA is to create a secure and standardized electronic delivery network for the safe exchange of business information, including e-invoices and supply chain documents. This is achieved through an exchange framework that the DBNA oversees. This framework is designed to standardize how businesses connect, what information they send, and how they electronically deliver this information.

One of the key features of the DBNA's exchange network is its support for a variety of electronic payment methods, such as instant payments, ACH, wire transfers, and card payments. This network is developed to resolve issues arising from the lack of a centralized system for sharing supply chain documents in the U.S. It ensures secure information sharing between businesses, even if they use different software systems.

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The DBNA uses a Four-Corner Model for its exchange framework, which means that e-documents are received through an Access Point service provider that connects the network to its users. Once connected, users can securely exchange electronic invoices and other electronic supply chain documents. The communication protocol used on the network is AS4.

This initiative was tested through a pilot project implemented in three stages throughout 2022, which went into production and is available to all U.S. businesses since January 2024.

### 2.4.2   E-invoicing Initiatives

### 2.4.2.1 Relevant Global E-invoicing Initiatives

In the meantime, e-invoicing is reflected in almost every organisation or initiative that is related to trade and commerce. For example, it became a topic in bi- and multilateral trade negotiations like the Indo-Pacific Economic Framework (IPEF), the EU-US Trade and Technology Council (TTC) and the Digital Trade Agreement negotiations between EU and Singapore/Republic of Korea/Japan.

The **OECD's international VAT policy dialogue** encompasses discussions on various aspects of VAT, including digital reporting and e-invoicing. The organization seeks to promote international cooperation, standardization, and best practices to ensure that VAT systems are efficient, transparent, and adapted to the challenges posed by digitalization in the modern economy. This helps countries harmonize their tax policies and facilitate cross-border trade while maintaining effective tax collection and compliance.

As part of the **EU-US Trade and Technology Council** in April 2024, e-invoicing has been explicitly mentioned. It underlines the ambition of the two regions to foster interoperability between the different local frameworks, as some differences have been determined. The joined declaration stated the decision to choose a group of experts to continuously work on aligning business and technical interoperability. This work includes the standardisation of the data structure and content as well as the interoperability between service providers.

The primary objective of the **Global Interoperability Forum (GIF)** is to build consensus and demonstrate how the member organizations Business Payments Coalition (BPC), Connect ONCE, Digital Business Networks Alliance (DBNA), Global Exchange Network Association (GENA) and OpenPeppol share a common vision for convergence to the maximum extent possible in the design and delivery of interoperable networks. This vision includes the belief in the power of the four-corner e-delivery model and in its positive impacts on supply chain efficiency for all actors. The GIF will also work to progress architectural alignment between interoperability frameworks and their components.

**GS1**, known for its standards in supply chain management and global data synchronization, also plays a role in the area of e-invoicing. Their activities typically include:

+ Standardization: GS1 develops and promotes standards for electronic invoicing. This includes standardizing the format and content of e-invoices to ensure consistency and interoperability between different systems and organizations.

+ Global Data Synchronization: GS1's Global Data Synchronization Network (GDSN) allows companies to share standardized and synchronized data, including pricing information, which is essential for accurate and efficient e-invoicing.

+ Barcoding and Identification: GS1 is renowned for its barcode standards, which can be used in e-invoicing for product and service identification. This ensures that the items on an invoice can be accurately identified and matched to a product database.

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+ Electronic Data Interchange (EDI): GS1 supports EDI standards, which are often used for transmitting e-invoices between companies. These standards help streamline the invoicing process and integrate it with other supply chain functions.

+ Education and Training: GS1 provides resources, training, and support to businesses implementing e-invoicing. This includes guidelines on best practices and the use of GS1 standards in the invoicing process.

### 2.4.2.2 VAT in the Digital Age (ViDA)

In general, the European Union (EU) has always been highly supportive seeing e-invoicing and e-procurement as key elements of the Digital Agenda and Single Market. The EU VAT Directive 2006/12/EU, as amended by Directive 2010/45/EU created a harmonized and supportive legal environment for e-invoicing focused on authenticity, integrity, legibility, and archiving. The Directive 2014/55/EU required that public sector contracting entities must be able to receive and process e-invoices.

Now, on the 8th of December 2022 as part of the VAT Directive 2006/112/EC, the European Commission (EC) announced the adoption of a new initiative - VAT in the Digital Age - that demands mandatory intra-community electronic invoicing and business-to-business (B2B) digital reporting [7]. This will require all businesses, without any thresholds or exemptions, to exchange intra-community invoices electronically by 2028 and in parallel fulfil the requirements for tax reporting. Within a ten-year period, the European Commission expects an additional VAT revenue of 111 billion € and savings for businesses of about 41 billion €.

The main elements of ViDA affecting electronic invoicing:

+ Once the digital reporting is introduced recapitulative statements or sales lists will no longer be required.
+ The definition of an electronic invoice will be changed to specifically make clear that it must have structured data i.e., a standard PDF will not be considered an e-invoice anymore. The required data elements and reporting format for the new intra-EU digital reporting will be based on EN16931, the existing European e-invoicing standard.
+ It includes the removal of the buyer consent. An invoice sender no longer needs to ask for the acceptance of electronic invoices by its customers.

An interesting additional aspect of the initiative is, that taxpayers will submit the required transactional data to the relevant national tax authority. Tax authorities will then share data with other member states by reporting it to the European Commission's new central database. This will encourage many countries to analyse their existing e-invoicing regulations and also evaluate the introduction of mandatory e-invoicing for B2B transactions on a national level. As a consequence, all EU countries will have initiated or implemented national tax platforms and mandatory e-invoicing schemes by 2028.

The final approval of the initiative is anticipated to occur soon, with a potential deferment of the implementation date to 2030.

### 2.5    The Global Dissemination of Data Format Standards

Numerous standardization initiatives have historically struggled to gain acceptance among stakeholders due to insufficient awareness of existing standards and the reluctance of certain insular organizations to adopt external protocols. This has led to the proliferation of numerous specialized standards with either domestic or industry-specific applications, particularly in recent years. Such standards are likely to sustain only if they adapt to form a subset of widely recognized global standards such as Oasis UBL or UN/CEFACT, or at least conform to a similar foundational model.

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In Europe alone, an estimated 10,000 ERP and accounting solutions are currently in operation. The integration of diverse e-invoicing standards generally falls outside the capabilities of ERP providers. Consequently, many e-invoicing network operators have emerged to offer any-to-any data formatting services. These services not only address legal and networking challenges but also significantly contribute to the central role of third-party providers in the e-invoicing sector across various nations. By utilizing such services, both issuers and recipients of invoices are liberated from dependency on any single standard and are no longer constrained by the pace at which a market-dominant standard emerges.

E-invoicing and procurement are critical elements of contemporary business operations, and the development of various international and industry-neutral standards has been central to enhancing these processes. These standards are designed to ensure efficiency, compatibility, and security. Below is an overview of some of the most prominent standards currently in use:

| Standard | Description |
| --- | --- |
| UBL 2.x<br>ISO/IEC 19845:2015 | Developed by the Organization for the Advancement of Structured Information Standards (OASIS), UBL is a widely accepted standard that provides a complete suite of XML-based business documents, including invoices. UBL, the Universal Business Language, is the product of an international effort to define a royalty-free library of standard electronic XML business documents such as purchase orders and invoices. UBL provides the standards for the Peppol framework and public procurement initiatives in several countries. |
| UN/CEFACT | UN/CEFACT (United Nations Centre for Trade Facilitation and Electronic Business), a United Nations body, has a global remit. It encourages close collaboration between governments and private business to secure interoperability for the exchange of information between the public and private sector. It has developed:<br>+ XML Industry Invoice D.16B, this XML format is widely used for cross-industry digital data interchange.<br>+ Cross Industry Invoice (CII) - This format focuses on generic invoice requirements, suitable for any industry globally.<br>+ The UN Layout Key for Trade Documents, which is the foundation for the EU's Single Administrative Document (SAD)<br>+ Numerous trade facilitation recommendations |
| PDF/A-3<br>ISO 19005-3 | PDF/A is an ISO-standardized version of the Portable Document Format (PDF), tailored specifically for the digital preservation of electronic documents. Unlike standard PDFs, PDF/A eliminates features that are not conducive to long-term archiving, an essential consideration for business documents that must be legally preserved over an extended period.<br><br>PDF/A-3, building on the PDF/A-2 (ISO 19005-2) standard, introduces a critical enhancement allowing the embedding of files in any format, such as XML, within a PDF/A document. This capability is pivotal for integrating non-PDF data within the archival format. |
| European Norm 16931<br>CEN/TC 434 | Directive 2014/55/EU mandated the creation of a European standard for electronic invoicing within public procurement to eliminate cross-border barriers.<br><br>The outputs from the project group encompass a European standard detailing the semantic data model for core components of an |

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| | electronic invoice, along with a technical specification that limits the number of invoice syntaxes and includes additional elements. The two syntax formats endorsed by CEN are UBL and UN/CEFACT. |
| | This standard is required to be implemented by all EU public administrations. Its architecture accommodates national usage specifications which dictate the mandatory use of certain elements while excluding others. Moreover, it facilitates national or industry-specific modifications. This foundation not only complies with current requirements but also establishes a robust framework for future business-to-business (B2B) applications. |
| CEN/TC 440 | The primary goal of these standards is to enhance and streamline the electronic public procurement processes and the associated informational flows within the physical and financial supply chains. They encompass standardized messages for e-notification, e-tendering, e-ordering, and e-fulfilment. |

Industry specific standards are:
+ **ETIS** (Electronic Telecom Invoice Standard): Developed by the ETIS community, it's used for electronic data exchange in telecom invoicing, addressing industry-specific aspects like data roaming and interconnect billing.
+ **EANCOM**: A subset of EDIFACT, specialized for retail industry invoicing, providing standards for electronic data interchange in global retail.
+ **ISO 20022**: Multi-industry standard for electronic data interchange between financial institutions.
+ **LITIG** (Legal IT Innovators Group): Used primarily by law firms for billing clients. It helps standardize the electronic exchange of cost information between law firms and their clients.
+ **PIDX** (Petroleum Industry Data Exchange): Developed by the American Petroleum Institute, this format is used globally for all transactional data in the petroleum industry, including electronic invoicing.
+ **Rosetta Net**: Uses XML-based messaging to standardize electronic business processes and transactions in the technology, electronic components, and semiconductor industries.
+ **HL7** (Health Level Seven International): HL7 CDA (Clinical Document Architecture) for invoicing, which is used for clinical documents but can be adapted for invoicing in healthcare services.
+ **ODETTE**: Used for automotive industry invoicing in Europe, facilitating supply chain and logistics operations data exchange.

Some country specific standards are:
+ Austria: ebInterface
+ Denmark: OIOXML (based on UBL)
+ Finland: Finvoice
+ Germany: XRechnung, ZUGFeRD
+ India: GST INV-1
+ Italy: BTW, FatturaPA
+ Spain: facturae
+ Sweden: Svefaktura, SFTI
+ Switzerland: swissDIGIN
+ Turkey: UBL-TR (based on UBL)
+ USA: ANSI ASC X12 810

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## 3.    Market Development and Drivers: Watch the Tornado!

### 3.1    Watch the Tornado!

Current market trends indicate a significant impact resulting from the delayed implementation of new electronic e-invoicing mandates and frameworks on a global scale. The majority of countries have not adhered to their initial timelines for introducing e-invoicing. Despite these delays, it is evident that transformative changes are imminent. This shift, akin to a silent revolution, remains largely unobserved at present but is poised to fundamentally alter the economic landscape.

Consequently, the theme of this report has been inspired by Geoffrey Moore's seminal works, 'Inside the Tornado' and 'Crossing the Chasm', reflecting the anticipated profound and rapid changes in the business environment.

'Inside the Tornado' by Geoffrey Moore is a seminal work in understanding the dynamics of market development for technological innovations. The book extends the concepts introduced in Moore's previous work, 'Crossing the Chasm', and focuses on the stages following the early adoption of technology. Moore outlines a technology adoption life cycle that includes several distinct stages: Innovators, Early Adopters, Early Majority, Late Majority, and Laggards. This cycle forms a bell-curve, starting small with Innovators and peaking at the Early Majority before declining.
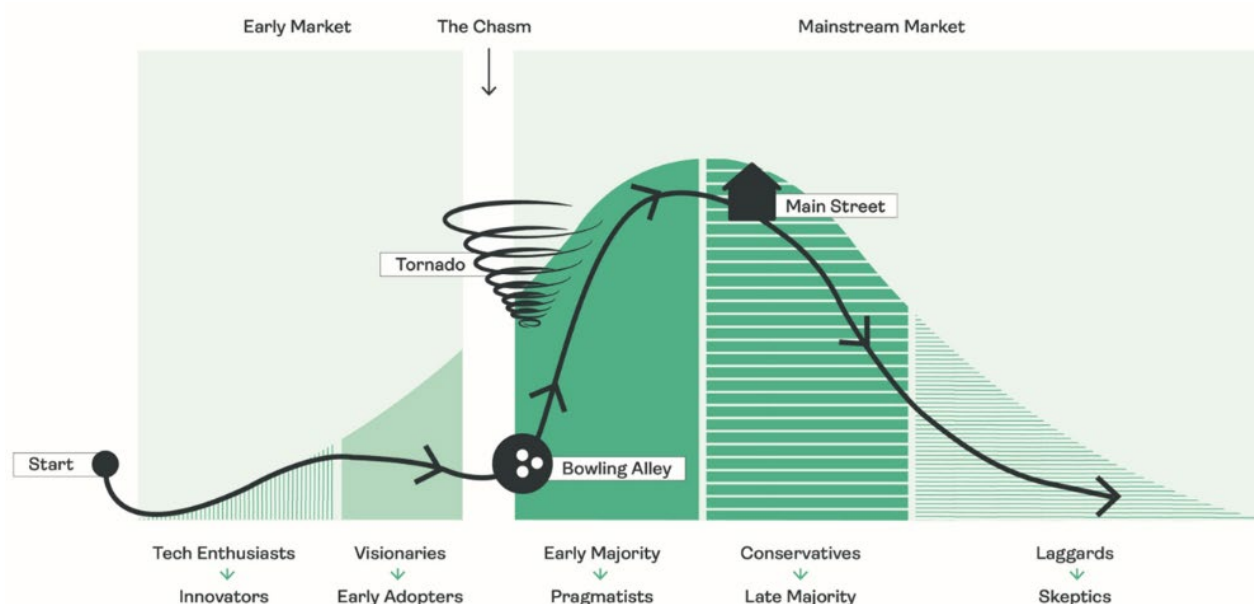


The book delves into three major phases of the technology adoption life cycle:

+   **The Bowling Alley**: A phase of niche adoption following the chasm, where companies must use their initial customers to attract further niche markets.

+   **The Tornado**: This phase occurs when a product gains rapid mainstream acceptance. Companies need to shift strategies drastically here, focusing on mass market appeal and commoditizing their product.

+   **Main Street**: After the excitement of the Tornado, demand stabilizes. Companies must then focus on differentiating their commoditized product to appeal to niche markets and individual customers.

In 2024, the market landscape continues to be shaped by numerous delays, with a limited number of multinational corporations initiating strategic planning in response to expected de-

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velopments. Nevertheless, based on numerous upcoming B2B mandates, the electronic invoicing sector is transitioning into a phase of widespread market adoption, referred to as the **'Tornado'** phase.

> **This signifies a pivotal shift to a new infrastructural paradigm, necessitating a deep understanding among both service providers and businesses. The anticipated increase in demand underscores the importance for service providers to offer relevant products and services, while businesses must proactively adapt to ensure readiness, often underestimating the requisite changes.**

In parallel to the development of the e-invoicing market, the nascent market for Integrated Digital Trade is on the brink of evolution. Presently in the 'Bowling Alley' phase, as per Moore's concept, it encompasses solutions such as Invoice Finance, Payment, and Procurement. Small and Medium-sized Enterprises (SMEs) and larger corporations are expected to navigate different routes towards embracing Integrated Digital Trade. SMEs, facing fewer transactions than their larger counterparts, may find limited benefit from automation, such as ERP system integration. Instead, SMEs are likely to prioritize integrated solutions focusing on payments or financing to leverage financial gains over automation benefits.

This trajectory is steering SMEs towards the **'Embedded Finance'** market, characterized by the incorporation of financial services within non-financial customer experiences, platforms, or journeys. Embedded finance integrates financial products into daily digital interactions, ranging from digital wallets to e-commerce platforms, most of which are fundamentally financial (e.g., banking, payments, lending, insurance). Originating in the US, where payments significantly drive the market, this segment is predominantly led by various payment providers. The US market for embedded finance is projected to grow from $22 billion in revenue in 2021 to $51 billion by 2026, with embedded B2B payments expected to quadruple from $1.9 billion to $6.7 billion in the same timeframe [8].
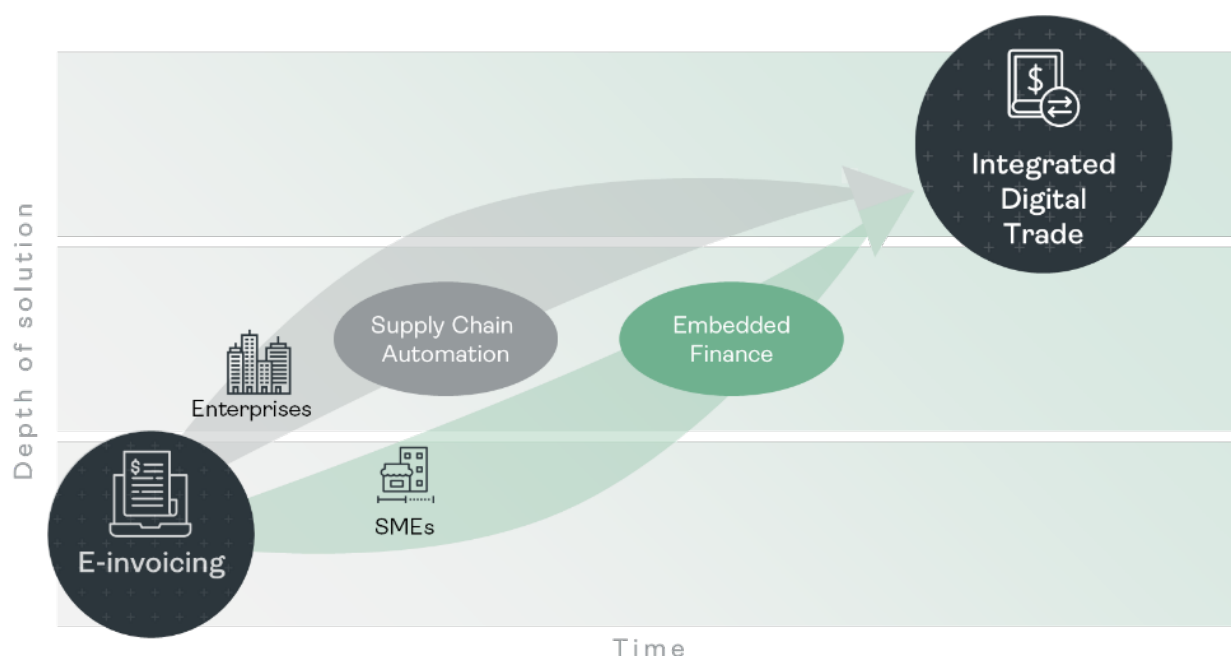


Now, the integration of e-invoicing and tax compliance solutions represents an additional significant component of embedded finance. This integration, particularly when embedded within accounting, ERP, or eCommerce solutions, is poised to efficiently serve the SME market by enhancing accounting software capabilities, thus streamlining the reconciliation of payments and invoices.

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For larger enterprises, the evolution beyond e-invoicing involves integrating and **automating supply chain** processes, including order and dispatch advisories, which promise greater savings than financial processes alone.

Ultimately, businesses of all sizes will adopt Integrated Digital Trade, merging all discussed processes. Exceptions will exist, such as companies with a significant Business-to-Consumer (B2C) focus prioritizing payment integration or SMEs adopting financial services early due to B2B e-invoicing mandates. Legal mandates will also significantly impact the adoption timeline, especially for SMEs, potentially leading to mass adoption close to mandate introductions.

Additionally, market dynamics such as Environmental, Social, and Governance (ESG) considerations and Artificial Intelligence (AI) are influencing the different market segments. Subsequent sections will delve into these drivers more comprehensively.

### 3.2    Invoice Finance as Key Accelerator of Supply Chain Finance

The International Finance Corporation (IFC), a World Bank affiliate, highlights electronic invoicing as a pivotal technology in Supply Chain Finance (SCF) within its 'Handbook on Technology and Digitization in Supply Chain Finance'. E-invoicing significantly streamlines processing, facilitates immediate triggers for acceptance and financing, and aids in data storage and analysis for understanding sales trends and forecasting future needs.

And indeed, e-invoicing and SCF exhibit a mutually beneficial relationship. E-invoices enable efficient information capture about receivables for financing, often through automated processes. Additionally, e-invoices offer delivery confirmation and buyer response messages, simplifying invoice approval and reducing non-payment risks unrelated to buyer creditworthiness. Automated invoice systems show a higher percentage of on-time payments compared to paper-based systems. 33% of transactions with automated systems are paid on time, while only 24% of paper-based invoices are paid on time [9].

The overall global supply chain finance market is expected to grow from $6 billion in 2021 to $13.4 billion by 2031, at a CAGR of 8.8%. The global split is approximately 55% North America, 24% Europe, 19% Asia and 2% Africa. This growth is being driven by a surge in the acceptance of supply chain finance in emerging economies and an increase in competition in the supply chain finance business, along with new agreements pertaining to the domain of supply chain finance. The integration of advanced technologies like blockchain in online supply chain finance business activities is also creating new opportunities in the market [10]. Still McKinsey estimated that the SCF market only covers around 10% of its full potential. There is still much potential to exploit, in particular in combination with electronic procurement and invoicing.

These figures highlight the dynamic and rapidly expanding nature of the supply chain finance market, reflecting its growing importance in global trade and finance. Currently, two developments will further increase the usage of SCF solutions as they negatively impact the working capital: increasing interest rates and extended late payments. The pandemic has exacerbated late payment issues. In 2020, Italy had about 43.9% of its B2B invoices unpaid with up to 30 days delay, and France recorded a 56% delay in on-time payments. South Africa also experienced a rise in late payments, with 91% of surveyed SMEs affected by late payments, averaging 18 days delay [11].

Suppliers, particularly small and medium-sized enterprises (SMEs), are adversely affected by delayed payments for their goods and services. To mitigate this issue, they are progressively offering discounts to their clients. However, these incentives have limited impact on shortening payment terms, such as a 15-day window to avail discounts, due to the inability of many large invoice recipients to expedite the processing of paper invoices beyond 23-25 days.

A client reported a loss of discounts amounting to EUR 1.50 per paper invoice. It was observed that the savings accrued from these discounts significantly outweigh the costs and investments associated with implementing electronic invoicing in this specific project.

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Invoice Finance, a subset of SCF, leverages financing and risk mitigation to optimize working capital and liquidity in supply chain transactions. SCF techniques, defined by the Global Supply Chain Finance Forum, encompass various domestic and international trade finance methods. Among the eight identified SCF techniques, four are pertinent to invoice finance: Receivables/Invoice Discounting, Factoring, Early Payments and Payables Finance.

The distinction between buyer-centric and supplier-centric SCF models is critical. Suppliers primarily prioritize access to financing, assurance of timely payments, and the security of guaranteed transactions. On the contrary, buyers emphasize optimizing working capital and leveraging discounts to their advantage. It is imperative for providers to offer solutions that cater to the distinct needs of both parties, ensuring these solutions are adaptable and suitable for small enterprises. Additionally, the flexibility to apply these solutions selectively, tailored to individual circumstances, is essential.

In supplier-centric SCF, suppliers directly seek financing, focusing on receivables discounting, factoring, and loans against receivables, with the primary risk being the buyer's payment obligation. Suppliers access credit against receivables due from customers as evidenced by their outstanding invoices. Businesses pay a percentage of the invoice amount to the finance provider as a fee/discount for obtaining the funds.

Conversely, in buyer-centric SCF, buyers collaborate with financiers to enable suppliers to discount receivables, known as Payables Finance or reverse factoring, where the main risk is the buyer's creditworthiness. The major advantage is that is relies on an approved invoice of the buyer which reduces the risk of fraud and disputes.



| Supply Chain Finance | | | | PO Finance |
|---|---|---|---|---|
| INVOICE Finance | | | | |
| Supplier-centric | | Buyer-centric | | |
| Receivables Discounting | Receivables Factoring | Early Payments | Payables Finance | |
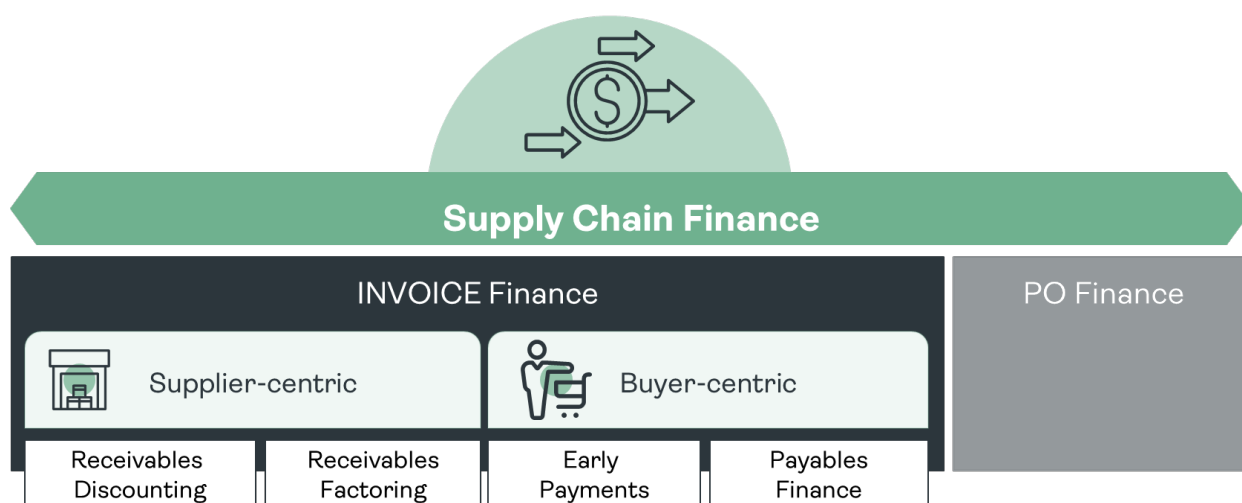
Regarding the Global Exchange Network Association (GENA), four key areas have been identified where service providers will present solutions [12]. GENA distinguishes the function of a service provider into two distinct roles: 'Activator' and 'Enabler'. In the **activator** capacity, a service provider may offer invoice finance to suppliers, leveraging receivables or invoice discounting. This may involve utilizing their own funding sources or collaborating with a financial partner to provide capital. Typically, this funding is offered on a selective basis or per individual invoice, employing various methods for initiating transactions, such as automated or manual selection.

Conversely, the **enabler** role opens a second category of opportunities for service providers in invoice finance, encompassing three areas: factoring, early payment discounts, and payables finance. In this role, a service provider might collaborate with a factoring company to facilitate transaction flow for financing by the factoring entity. They could also enable early payments for suppliers via a portal or dashboard, based on static or dynamic discounts from a

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buyer. Additionally, a service provider might assist a bank or another institution in organizing a payables finance or reverse factoring program. This would involve onboarding suppliers and integrating invoices into the buyer's platform. In these scenarios, the financing or discounting is primarily driven by an entity other than the service provider.

### 3.2.1 Receivables/Invoice Discounting

Receivables/Invoice Discounting, an advanced supplier-focussed financial instrument, is tailored for businesses that engage with a wide-ranging customer base and issue invoices on open account terms. This process involves a business selling its accounts receivable (invoices) to a finance provider at a discount, in exchange for immediate cash. This enables businesses to free up capital tied in unpaid invoices, enhancing cash flow and operational liquidity.

The end-customer is afforded a set period to pay the supplier for the invoice, offering a balance between immediate cash flow needs and customer payment terms. A key feature of this arrangement is the ability for a company to set up a 'master' invoice discounting facility. This facility allows the selective discounting of invoices for specific customers, subject to a predetermined maximum value of outstanding invoices.

Focus is placed on the combined value of the discounted invoices, their inherent credit quality, and in some cases, the availability of credit insurance to cover outstanding balances. While it's possible to discount invoices on a one-time, selective, or 'spot' basis, such 'single invoice' discounting is generally less common and often handled by banks under specialized arrangements or by FinTech firms.

In this setup, all receivables represented by the discounted invoices are typically sold or assigned to the finance provider, conforming to the legal requirements of the jurisdictions involved. This financial solution offers notable flexibility, allowing businesses to adapt their invoice discounting practices to their fluctuating funding requirements. It serves as a strategic tool for managing cash flow, providing immediate access to funds while waiting for customer payments.
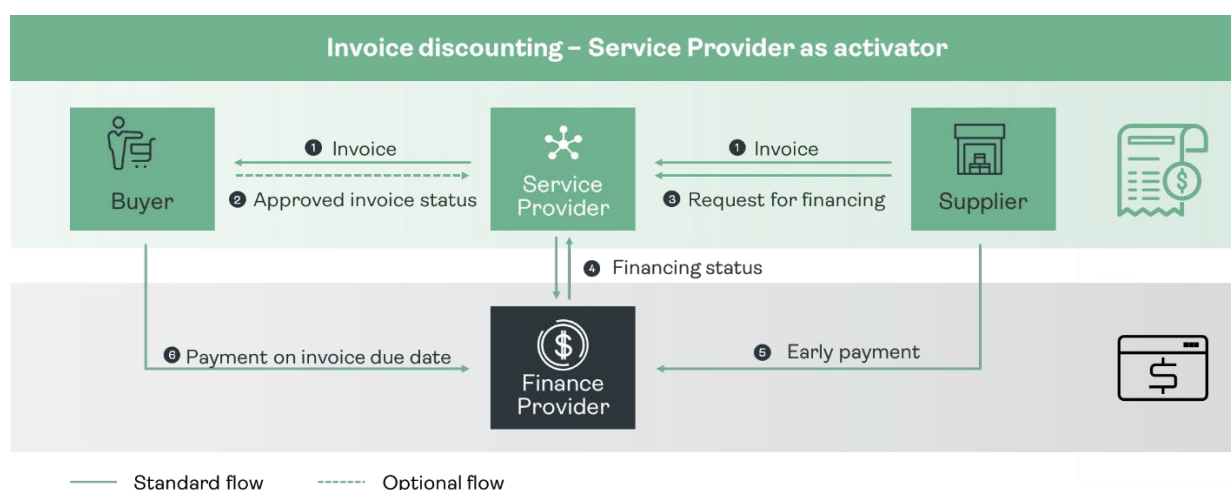


### 3.2.2 Receivables Factoring

Factoring is a comprehensive supplier-centric financial solution for businesses, blending elements of debt financing and outsourced credit control. It involves a business selling its accounts receivable (invoices) to a third party (the factor) at a discount. This method is a well-established, supplier-focused approach to invoice financing, facilitating the mobilization of funds through a revolving portfolio of outstanding invoices. Typically, these invoices come with predetermined payment terms, such as 30, 60, 90, or 120 days.

The factor evaluates the seller's overall business strength, the borrower's credit risk profile, and the quality of the receivables represented by the invoices being factored. Upon approval,

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the factor usually advances a percentage of the invoice value to the seller shortly after their issuance. This advancement process, contingent on legal jurisdictions, is conducted through the sale or assignment of the underlying receivables indicated by the invoices.

In addition to providing immediate capital, factoring offers businesses the advantage of delegated credit control. The factor manages the entire process of collecting payments from the end customers, which includes issuing reminders, managing the sales ledger, and pursuing overdue accounts. By taking over these administrative tasks, the factor allows the business to focus on core operations without the burden of managing credit and collections.

Upon collection of the payments, the factor deducts a fee for their services and remits the remaining balance to the business. This model not only improves cash flow for the business but also transfers the risk of bad debts to the factor, thereby offering a dual benefit of liquidity and credit risk management. Factoring is particularly beneficial for businesses looking to optimize cash flow, manage credit risk, and outsource the administrative burden of credit control.

### 3.2.3 Early Payments/Dynamic Discounting

Early payment discounts, often referred to as cash or prompt payment discounts, are an advantageous commercial arrangement between buyers and sellers, distinct from traditional financing methods. In this setup, buyers utilize their own liquidity to settle invoices prior to the stipulated due date. By doing so, they benefit from a reduced payment amount, while sellers gain the advantage of receiving funds earlier than the standard payment terms would allow. An example of such an arrangement is the '2% 10 Net 30' term, where the buyer is entitled to a 2% discount if payment is made within 10 days.

These discounts serve as a financial incentive for buyers to pay early and help suppliers improve their cash flow. It's a win-win situation: buyers save money, and suppliers get faster access to cash. This is particularly beneficial for suppliers, as it provides a more predictable cash flow and reduces the reliance on external financing.

Dynamic discounting takes this concept further by introducing a flexible, variable discount scale based on how early the payment is made. This model allows for more nuanced control over the timing and amount of discounts, providing additional flexibility for both parties. Finance providers support these arrangements through electronic invoicing and interactive dashboards, making the process more efficient and transparent.

Dynamic discounting allows buyers and sellers to dynamically change the payment terms to accelerated payment based on a sliding discount scale. The buyer allocates a 'pool' of liquidity, determines liquidity limits, and establishes the interest rate for early payments. Once invoices are approved, the suppliers are automatically informed about new early-payment options. Through the portal, suppliers can view their approved invoices and trigger payments prior to the nominal due date, accepting the corresponding discounts.

The dynamic discounting functionality may be directly implemented as a Plug-In in the ERP or accounting application of suppliers and buyers. Another smart way is a 'Pay me early button' on the buyer's e-invoice portal (in case of direct exchange) or on the portal of the e-invoicing network operator.

Utilizing corporate liquidity for early payments is often considered a strategic use of funds, as it not only meets the payment obligations but also potentially yields a higher return compared to traditional money market investments.

### 3.2.4 Payables Finance

Payables Finance, alternatively referred to as reverse factoring, represents a buyer-centric financial mechanism. This arrangement enables suppliers to finance their accounts receivable monies owed for delivered goods or services. It is initiated by the purchasing entity, typically a

large organization with robust creditworthiness. This setup allows suppliers to access more favourable financing terms, leveraging the buyer's superior credit standing instead of the terms available through direct lending sources.

The operational framework involves a finance provider collaborating with the purchasing company to establish a master facility. This facility is then extended to a select group of the buyer's suppliers. Part of this arrangement may include revising the payment terms on the invoices issued by these suppliers. Consequently, suppliers are presented with the option to monetize their receivables, which can be executed either through receivables assignment or via an advance payment model.

### 3.3    How New Payment Solutions and E-invoicing are Combatting the Late Payment Epidemic

### 3.3.1   Reasons for Late Payments of B2B and B2G Invoices

Looking at the main reasons why invoices are paid late, it becomes obvious that there is a strong relation between e-invoicing and payments. By late payments we mean payments that are paid later than the due date requested by the seller on the invoice. There are two main classes of late payments under this definition:

Firstly, there are scenarios that will result in late payments that arise from actions taken by the buyer. These could be slow and manual driven processes for approval as well as policies regarding the scheduling of payments according to internal 'payment runs" or imposing extended credit terms on suppliers.

Secondly, sellers may experience payment delays because of issues arising during the invoicing process:

+ Invoices made out to an incorrect legal name or in the wrong legal domicile.
+ Invoices sent to the wrong address for the responsible business unit or individual.
+ Invoices contain the wrong reference data about a transaction, such as a Purchase Order (PO) number.
+ Problems with the actual supply of goods and services described in the line items on the invoice and requiring correction.
+ Incorrect classification of the goods and services for tax purposes or another problem with respect to the tax arising in specific circumstances.
+ Inadequate information about the means of payment or destination

This incorrect information on the invoice is a major reason for delays (Asia-Pacific 25,7%, Americas 26,3%, Europe 15,1%, Australia 21,4%).  An example from Australia [13] indicates that in 2015 only 77% of invoices had the correct legal name, 66% the correct postal address and 58% the right business address. Sending the invoice to the wrong contact person is another almost equally important reason (Asia-Pacific 19,2%, Americas 21,4%, Europe 11,6%, Australia 21,9%).

| Incorrect information on invoice | Sending invoice to wrong contact |
|---|---|



Australia 21% | Asia-Pacific 26% | Europe 25% | Americas 26%

Australia 22% | Asia-Pacific 19% | Europe 12% | Americas 21%
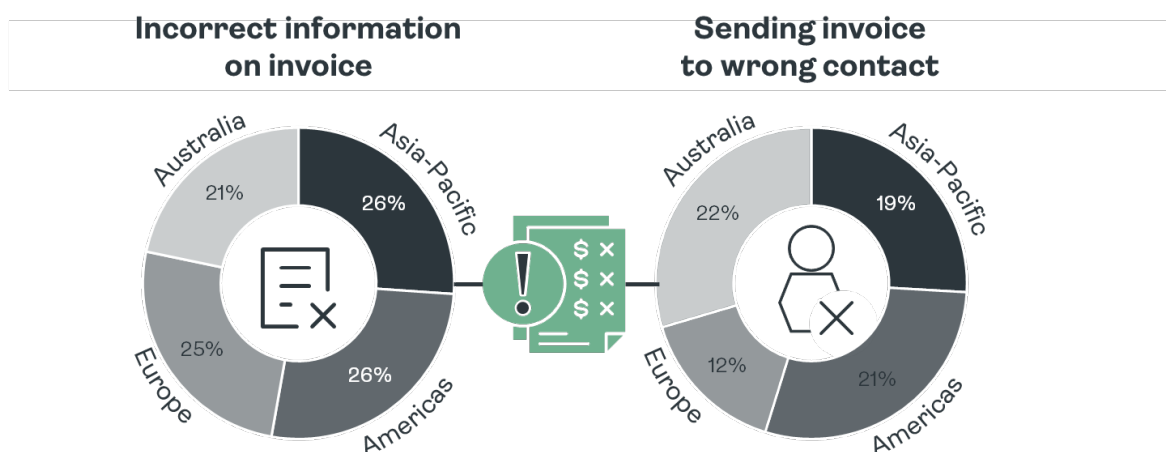
As already described in both above and in earlier chapters, payments of invoices are all too commonly late with reference to requested due dates, the majority of which stipulate what can be described as 'normal' payment terms. The average payment delay for B2B invoices is reported [14] to be 50 days in Asia, 34 days in Western Europe and 32 days in Eastern Europe. In North America and Mexico about 60% of all invoices are paid late. For Australia this number is about 54%.

### 3.3.2 E-invoicing and Regulatory Initiatives to Overcome Late Payments

Typically, supplier related causes for late payments can be overcome by introducing e-invoicing as the following advantages apply:

+ The invoice is populated with static data that can be acquired and preserved in digital form for repetitive use. This includes addressing and payment data.
+ Where supply chain automation is applied to adjacent processes such as POs and Delivery Notes there is opportunity for internal checks at all stages of a transaction and routine reconciliation with the ERP system.
+ Tax management can be automated and linked to the tax declaration process.
+ Electronic invoicing creates the potential for transparency, distributed working, fewer fraud and errors, and speed of response by both the buyer and supplier.

Buyer related causes however have triggered numerous legal and regulatory initiatives to tackle the problem. These initiatives should create a more favourable environment for small and medium sized companies as they suffer most acutely from late payments often leading to serious liquidity problems and even bankruptcy.

To protect European businesses, in particular SMEs, against late payment and to improve their competitiveness, Directive 2011/7/EU on combating late payment in commercial transactions was adopted on 16 February 2011 and was due to be integrated into national law by EU countries by 16 March 2013 at the latest. The main provisions of the initiative are:

+ public authorities must pay for the goods and services that they procure within 30 days or, in very exceptional circumstances, within 60 days
+ enterprises must pay their invoices within 60 days, unless they expressly agree otherwise and provided it is not grossly unfair
+ provision for the automatic entitlement to interest for late payment and €40 minimum as compensation for recovery costs
+ statutory interest of at least 8% above the European Central Bank's reference rate

However, because of unsatisfactory results experienced with existing legislation the Commission is working on a revision of the Late Payment Directive and launched a call for evidence, a

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public consultation and an SME panel. In March 2023 the European Innovation Council Executive Agency (EISMEA) in collaboration with the Directorate General for Internal Market, Industry, Entrepreneurship and SMEs (DG GROW) of the European Commission also launched the EU Payment Observatory. The EU Payment Observatory is a two-year initiative that should play a crucial role delivering transparency on payment discipline at EU level and will aim to provide SMEs with a modern and strong legal framework.

Besides those initiatives specifically focusing on late payments, the integration of payments is becoming an important part of increasingly common e-invoicing mandates. While the specifics can vary by country or region, the inclusion of payment messages in e-invoicing mandates typically means that the electronic invoice must contain not just details of the goods or services provided, but also information that facilitates the payment process itself. This can include payment terms, payment instructions, and sometimes even payment status updates. Some examples of regions and countries with e-invoicing mandates that may include aspects of payment messages and data are:

+ **Europe**: Italy's Sistema di Interscambio (SdI) for e-invoicing can include payment information, such as bank account details and payment terms. In their respective legislative frameworks, Spain and France have anticipated the necessity for reporting both the status of payments and the due dates associated with electronic invoicing processes. Within these jurisdictions, it is mandatory for either the purchaser or the supplier to notify their business counterpart as well as the tax authorities upon the execution or receipt of a payment.

+ **India**: The Goods and Services Tax Network (GSTN) in India mandates e-invoicing for mid-sized and large taxpayers. While the primary aim is to capture invoice details for tax purposes, the system also allows for the inclusion of payment information, which can facilitate the payment process.

+ **Latin America**: Countries like Brazil, Mexico, and Chile have some of the most advanced e-invoicing regulations globally. These systems often include detailed requirements for invoicing and may include payment information. For example, Brazil's Nota Fiscal Eletrônica (NFe) system encompasses invoicing and can include payment details.

+ **Saudi Arabia**: The ZATCA (Zakat, Tax and Customs Authority) e-invoicing system, also known as Fatoorah, mandates electronic invoicing and includes provisions for including payment data within invoices.

### 3.3.3 Dynamic Market Developments in Payments Create New Opportunities

Payment market developments are mirroring those observed in e-invoicing and supply chain automation, together reflecting a profound evolution in the financial transaction landscape. This evolution is primarily attributable to technology advances, shifts in business and consumer behaviour, and changes in regulatory frameworks and models.

Key global payment developments in payments are:

+ The move to electronic payments affecting all high value, commercial B2B and consumer payment services. The roll out of new schemes for instant payments are attracting growing volumes in Europe, North America and globally. The use of Internet Banking is leading to retail branch closures as industry economics change and all banking services can be accessed online.
+ The explosion in card payments, debit, credit, charge, mobile and 'virtual' with massive proliferation of point of sale (POS) and online infrastructure supported by enhanced security and authentication mechanisms.
+ New regulatory models that are designed to create a more competitive landscape by enabling non-bank players and FinTechs to provide payment services and directly

compete with banks/credit institutions. Such opportunities are discussed in section 4 below.

+ An important category of new model is described as Open Banking whereby a non-bank player has the right to securely access (with a customer's consent) a bank account from which to launch payment and information services. This has so far proved difficult to implement at the practical level leading to further regulatory developments to improve the situation.

Not surprisingly, global payment revenues are generating vigorous double-digit growth in most markets. Various forecasts predict the market will expand from between $1.6 trillion and $2,2 trillion in 2022 to between $2.2 trillion [15] and $3.2 trillion [16] by 2027 in terms of payment-related revenues. According to these projections, commercial payment revenues account for 53% of the total market value, with consumer transactions contributing the remaining 47%. This distribution varies by region, with commercial revenues dominating in the Asia-Pacific and EMEA regions. Conversely, in North America and Latin America, consumer transactions are the primary revenue source, predominantly through card transactions, accounting for 63% and 54% of the market, respectively. However, despite the rapid adoption of electronic payments and a relative decline in the number of economic transactions paid for with cash, some countries (especially the United States) maintain a substantial volume of transactions via cash and checks, with checks comprising about 40% of transaction volumes [17] in the United States.
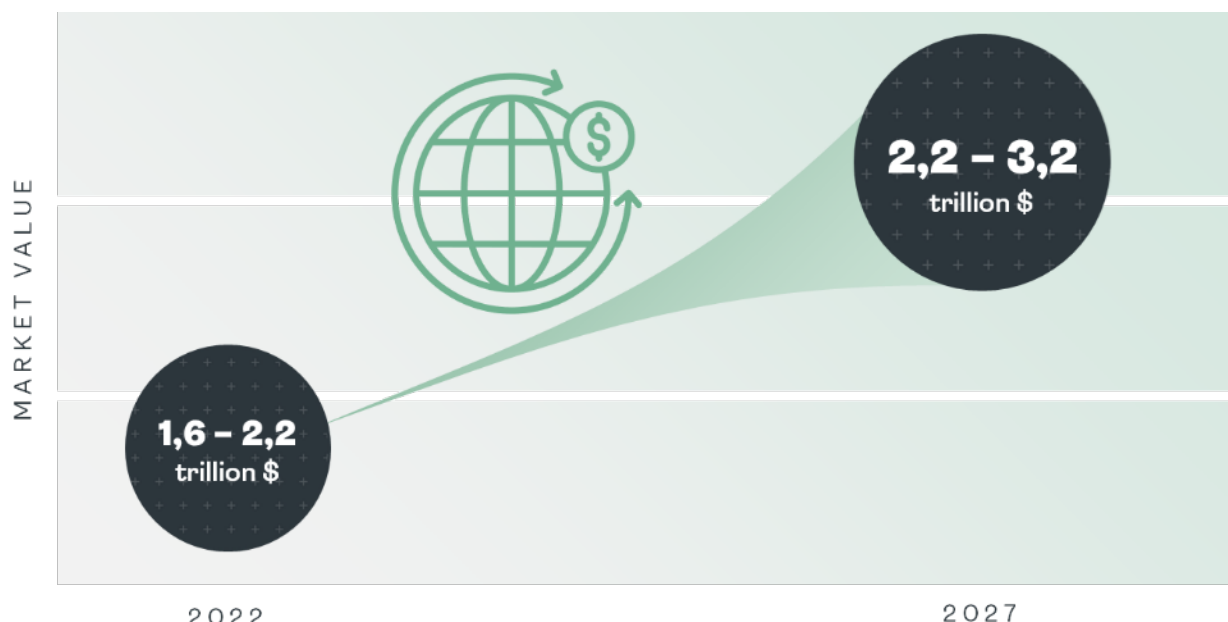


The opportunities and revenue opportunities described above have led to major investments by incumbents and the emergence of over 5,000 FinTechs [15] offering payment-related services. Recent market developments facilitate the adoption of means of payment for recurring and one-off 'push' and 'pull' payments operated over real-time electronic rails. Over sixty jurisdictions [18] have introduced the transformative availability of instant payment services, enabling the immediate availability of funds for small-value transactions, such as the SEPA Instant Credit Transfer Scheme.

Enhanced data access and standardization are enabling a diverse array of applications, including real-time customer acquisition, faster onboarding, digital identity verification and strong customer authentication, digital wallets, and the use of QR codes etc. Digital wallets, as both the source and destination for large element of the instant payment volume, are experiencing significant growth especially in certain regions.

As B2B and B2G markets embrace instant payments, the cycle of sending an e-invoice, the initiation of the payment, and their reconciliation are also becoming a 24/7 real-time process.

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As customers seek enhanced user experiences and businesses demand full supply chain automation, further innovative payment solutions in 'Embedded Finance' and 'Integrated Digital Trade' are emerging.

Market dynamics are changing, newer players are complementing head-on competition with the creation of alliances with banks and large payment users with the objective of embedding innovative services and access modes in their partner systems ('coopetition'). All this activity among FinTechs has not surprisingly prompted banks to refresh their own digital payment services as a competitive market response.

On the horizon is the potential implementation of Central Bank Digital Currencies (CBDCs); while still years from widespread implementation, CBDCs are under consideration by over 90% of central banks globally. The Bank for International Settlements estimates that by 2030, up to fifteen retail and nine wholesale CBDCs could be operational worldwide. The introduction of these digital currencies is expected to have a considerable impact on the payments ecosystem, highlighting the importance of the design and policy decisions in their development. CBDCs are the digital equivalent of physical cash and would create the opportunity to operate electronic payment services outside the scope of the traditional bank account.

### 3.3.4 Payment Solutions for New Players that Integrate Digital Payments with the E-invoicing Process

The payments market is well established and dominated by strongly capitalised incumbents, mainly banks and supporting infrastructural organisations such as credit card companies. The entry of FinTechs and e-invoicing service providers into this space requires time, resources, and carefully crafted value propositions. Such strategies are being executed through alliances as often as not.

Based on the above discussion in earlier sections on late payments, the role of e-invoicing, new regulatory models for payments, and rapid market developments, there are a multitude of opportunities available. The most compelling one of these is addressing the integration of the e-invoicing and digital payments processes much more coherently; the relationship between invoicing and payment processes is self-evident, but within the Business-to-Business (B2B) sector, these functions have historically been managed as separate processes. There are challenges for larger enterprises arising from a similar separation between IT systems for accounting, ERP, payment processing, and customer/ supplier databases. Integrating electronic invoicing with accounting systems frequently leads to reduced integration with payment mechanisms. For smaller enterprises there is a need for systems that can directly link invoice data to the payment interfaces they use.

The Global Network Exchange Association (GENA) has identified an array of opportunities for integrating e-invoicing and e-payments for businesses [19]. These take advantage of quite recent regulatory licences. They also allow for the achievement of product capability through in-house development or alliances.

Become a **Payment Service Provider**: This model offers payment services through various regulatory licences, such as

+ the Payment Institution or Electronic Money Institution, which enable customer payment account and the offer of payment services.
+ A Payment Initiation Provider (PISP), which has the right to access customer bank accounts for payment initiation services, and Account Information Provider (AISP), which aggregates and reports consolidated information, often from different banks.

Offerings could encompass:

+ The facilitation of initiating and receiving payments, enhancing the invoice to payment process.
+ A collection service for suppliers to manage multiple sales relationships.
+ Integrated account information services aiding in reconciling payments with invoices and supporting comprehensive reconciliation processes.
+ Electronic invoice presentment and payment via web services for consolidated invoice management.
+ For online commerce and retail point-of-sale, instant invoicing and payment processes could enhance the checkout experience and customer satisfaction, offering an alternative to traditional card payments.

**Request-to-Pay (RTP):** This model facilitates the coordinated processing of invoices and payments without handling the payments directly. RTP offers automation and control over the payment process for both suppliers and customers. It allows suppliers to specify the timeline for payment acceptance and execution and includes remittance information for reconciliation. RTP enhances the traceability of invoices and payments, linking the invoice, request-to-pay message, agreement-to-pay message, and actual payment.

Potential use cases include:

+ For B2B, enabling large suppliers to notify customers, such as retail outlets, to fulfil their payment obligations promptly.
+ For smaller suppliers, facilitating easy payment completion for goods and services delivered to SME customers or consumers.

Offer **Payment Integration Services:** This includes the tight integration of e-invoicing with payment flows, reconciliation, and transaction-based reporting and monitoring services accessible to customers. These services can be offered alongside the afore-mentioned services or independently of any regulatory licence. This rather wide area is very susceptible to alliance strategies and could involve:

+ E-invoicing service providers partnering with banks or Payment Institutes to offer payment execution services, focusing on a comprehensive suite of services supporting e-invoicing integration, reconciliation, and process optimization.
+ E-invoicing service providers developing strategies to enable payment service providers, such as banks, to incorporate e-invoicing into their offerings, potentially targeting the SME market.
+ Leveraging e-invoicing as a foundation for supply chain finance, where payment data triggers invoice financing processes, combining payment services with invoice finance and facilitating credit management decisions through invoice analytics and payment data.

### 3.4    E-procurement Rapidly Evolving into a Crucial Facet of Integrated Digital Trade

E-invoicing has achieved greater prominence and broader implementation across many countries compared to e-procurement. This disparity stems primarily from the fact that governments and tax authorities globally have prioritized e-invoicing, whereas e-procurement has been primarily driven by the private sector. According to data from Eurostat [20], in 2018, 17% of businesses in the EU with ten or more employees received at least 1% of their orders electronically.

Invoices play a crucial role in the procurement process. Many recurring invoices are linked to open-ended contracts, such as leases or maintenance agreements. While a large volume of goods and services are ordered through simplified means like telephone, online platforms, or email, formally structured purchase orders (POs) are less common, comprising only 6-7% of all invoices.

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Currently, the full potential for optimization in this sector remains untapped. One significant barrier is the organizational structure within companies, where approximately 50% of purchasing and finance managers operate under separate reporting lines, often with considerable autonomy over their processes and digital transformation initiatives.

However, the landscape is evolving. The narrow focus on initial e-procurement and e-invoicing processes is no longer adequate. Formerly concentrated on e-invoicing, businesses are now progressing towards automating integrated digital trade processes. Similarly, entities initially focused on e-procurement are expanding their capabilities to include e-invoicing. This convergence is leading towards a more holistic and integrated approach, which could pose substantial challenges during the transition period for many businesses and solution providers. In this new era, procurement managers will need to engage more actively in e-invoicing projects that are crucial for leveraging the comprehensive benefits of accounts receivable (AR) and accounts payable (AP) automation.

| Issue | Impact of procurement managers on invoice process automation |
|---|---|
| Heterogeneous processes and systems for e-procurement and e-invoicing | + Holistic digitalisation and automation strategy |
| Supplier management and engagement | + Reducing fraud and identifying bad actors<br>+ Considering only the master data of tax-registered partners and increasing tax compliance<br>+ Streamlining and automating supplier interaction from onboarding to the processing of invoices and updating of master data |
| Contract and catalogue management | + Avoiding invoicing with incorrect amounts, ensuring accuracy of prices and compliance with synchronisations and data validations |
| Discount management | + Applying discounting models that can be reflected in business process automation solutions |
| Fake invoices, no or incomplete supply behind an invoice | + Establishing tax compliance processes, including evidence for supplies behind invoices |
| Purchase process | + Increasing the proportion of electronic orders and invoices<br>+ Automating the matching process |
| Evidence for tax compliance | + Storing the documents in a way they can be retrieved in the same index for the entire process cycle |

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By 2030, we anticipate significant advancements in the integration and automation of procurement and invoicing processes. This progression will be further supported by public-sector initiatives throughout Europe.

### 3.5 VAT and Sales Tax Automation and Filing Inches Towards Integration with E-invoicing Systems

VAT (Value Added Tax) and Sales Tax (ST) automation in relation to e-invoicing involves using digital solutions to streamline the process of calculating, reporting, and paying taxes. This is increasingly important as more countries adopt e-invoicing regulations to enhance tax compliance and reduce fraud. Here are some key solutions and strategies for tax automation in the context of e-invoicing:

+ **Integration with Accounting Software**: Implementing e-invoicing solutions that seamlessly integrate with existing accounting or ERP (Enterprise Resource Planning) systems. This ensures that VAT/ST calculations are automatically aligned with sales and purchase data.

+ **Real-time VAT/ST Calculation**: Utilizing software that calculates VAT/ST in real-time during the invoicing process. This helps in ensuring accuracy and compliance with local VAT/ST rates and rules.

+ **Automated Tax Compliance Checks**: Implementing systems that automatically check invoices for compliance with tax regulations. This includes verifying VAT and Sales tax rates, tax identification numbers, and other mandatory fields.

+ **Audit Trails and Record Keeping**: Maintaining digital records of all transactions, including changes and corrections, to provide a clear audit trail. This is essential for tax audits and compliance checks.

+ **Cross-border VAT Handling**: For businesses operating internationally, implementing solutions that can handle multiple VAT regimes and keep up-to-date with varying international VAT laws and rates is crucial.

+ **Use of AI and Machine Learning**: Leveraging AI to improve VAT/ST reporting by identifying patterns, anomalies, and potential areas of non-compliance. This can be particularly useful for large businesses with complex transactions.

+ **Cloud-based Solutions**: Utilizing cloud-based e-invoicing and VAT/ST calculation solutions for scalability, flexibility, and ensuring that the system is always up-to-date with the latest tax rules and rates.

+ **Data Analytics and Reporting**: Advanced analytics can provide insights into VAT/ST liabilities, opportunities for tax reclaim, and overall tax efficiency.

+ **Supplier and Customer Onboarding**: Educating and integrating suppliers and customers into the e-invoicing platform to ensure seamless transactions and tax compliance across the supply chain.

Each of these solutions plays a role in creating a robust and efficient VAT/ST management process in the context of e-invoicing, helping businesses to comply with regulations, reduce errors, and optimize their tax position. It's important to choose solutions that align with specific business needs and are compliant with the legal requirements in the jurisdictions where the business operates.

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### 3.6 Emerging Technologies like Artificial Intelligence are Changing the Market

#### 3.6.1 The Search for New Technologies Supporting Business Automation

Within the invoicing cycle, a significant portion of tasks are both repetitive and time-consuming for both issuers and recipients. Despite this, at least 80% of invoices globally continue to be processed manually. While there is some utilization of scanning technologies for key data extraction, invoices are frequently exchanged solely in electronic formats. The validation of invoice data occurs on electronic invoice exchange platforms and within some processing systems, predominantly by the recipients of invoices. These procedures facilitate a decrease in the necessity for manual intervention in exceptions, generally reducing this requirement to approximately 20% or marginally less. How might emerging technologies further enhance the automation of these processes?

Over the past few years, there has been a significant transition towards the adoption of cloud services. Approximately two-thirds of European electronic invoices are currently being processed through cloud platforms, and this percentage continues to grow. Nonetheless, in certain nations, the adoption rate remains considerably lower, though our projections indicate it could increase to 70% by 2028. The drive towards cloud adoption is fuelled by its extensive benefits, including reduced and more flexible costs, enhanced agility and speed, improved change management, heightened collaboration, competitive edge, and access to cutting-edge technologies.

Artificial Intelligence (AI) is poised to be the next major disruptor in the business landscape. The rapid advancements in AI technology over recent years and months have demonstrated its capacity to significantly impact the e-invoicing sector.

#### 3.6.2 Terms and Definitions for Artificial Intelligence

Artificial Intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think and learn like humans. The goal of AI is to create systems capable of performing tasks that would require human intelligence, such as reasoning, learning, problem solving, perception, and understanding natural language.

AI can be categorized into different subsets, each with its own specific focus and methodologies. The major subsets of AI include:

+ **Machine Learning (ML):** This subset focuses on the development of algorithms and statistical models that enable computers to perform specific tasks without using explicit instructions. Instead, they rely on patterns and inference derived from data. ML is all about making predictions or decisions from data, thus enabling machines to improve their accuracy over time as they are exposed to more data. ML is the backbone of many AI systems, providing the learning capability that allows these systems to adapt to new data independently. Deep Learning is a subset of Machine Learning and utilizes neural networks with many layers (hence 'deep') to analyse various factors of data. It's particularly effective for tasks such as speech recognition, image recognition, and natural language processing.

+ **Natural Language Processing (NLP):** NLP is another critical subset of AI that deals with the interaction between computers and humans using natural language. The ultimate objective of NLP is to enable computers to understand, interpret, and generate human language in a way that is both valuable and meaningful. NLP combines computational linguistics—rule-based modelling of human language—with statistical, machine learning, and deep learning models. This field enables a wide range of applications, including translation, sentiment analysis, and chatbots, by allowing machines to process and understand human language.

+ **Robotic Process Automation (RPA):** This is an application of technology that allows businesses to configure computer software or a 'robot' to capture and interpret existing applications for processing a transaction, manipulating data, triggering responses, and communicating with other digital systems. RPA is primarily focused on automating routine, rule-based tasks that require interaction with computer systems. This can include tasks like data entry, processing transactions, managing records, and even responding to simple customer service queries. RPA does not require the understanding or interpretation of data in the way ML does. Instead, it follows predefined rules and workflows to automate processes. While it can be enhanced with AI capabilities to handle more complex tasks that require decision-making or pattern recognition, RPA in its basic form is not about making decisions based on data patterns but about automating repetitive tasks.

  Academic studies [21][22] predict that robotic process automation (RPA) might start a new wave of efficiency gains. Oxford University [21] speculates that many jobs in the area of invoice processing may become automated by 2035, especially New Accounts Clerks, Data Entry Keyers, Order Clerks, Procurement Clerks, Claims Adjusters, Examiners and Investigators, Bookkeeping, Accounting, Auditing Clerks, Credit Authorizers, Checkers, Billing and Posting Clerks, Surveying and Mapping Technicians, Bill and Account Collectors, Accountants, and Auditors. The common feature of all these positions is a high proportion of repetitive work in the area of invoice processing.

+ **Expert Systems**: Expert Systems are a branch of AI that focuses on mimicking the decision-making ability of a human expert. They are designed to solve complex problems by reasoning through bodies of knowledge, represented mainly in if-then rules rather than through conventional procedural code. Expert systems are one of the earliest forms of AI and are used in applications requiring specialized knowledge or expertise, such as medical diagnosis, engineering, finance, and more. They rely on a knowledge base and a set of inference rules to simulate the expertise of human specialists.

All these technologies are interrelated under the broad umbrella of AI, each contributing to the goal of creating machines that can act and think with some degree of human-like intelligence. While ML provides the learning capabilities, NLP focuses on understanding and generating human language. RPA automates routine tasks, potentially enhanced by AI to handle more complex processes, and Expert Systems simulate the decision-making process of human experts. Together, these technologies demonstrate the diverse applications of AI and its potential to transform industries by automating tasks, deriving insights from data, and enhancing decision-making processes.

**'Generative AI'** is a significant aspect of the next generation of artificial intelligence technologies. Generative AI encompasses algorithms and models that can generate new content, including text, images, music, and even code, that is similar to human-generated content. This field has seen rapid advancements, particularly with models like GPT (Generative Pre-trained Transformer) for text generation and DALL-E for image generation, both developed by OpenAI.

These advancements suggest a shift towards more creative, versatile, and autonomous AI systems capable of performing tasks that require creativity and innovation, alongside traditional analytical capabilities. Generative AI models have applications in various domains, including entertainment, art, design, content creation, and even scientific research, where they can generate novel hypotheses or simulate data.

The designation of 'next generation' highlights the evolutionary leap in AI's capabilities, moving from systems that primarily analyse and interpret existing data to those that can create new, original outputs.

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### 3.6.3  The Role of Artificial Intelligence within the E-invoicing Process

Artificial intelligence (AI) plays a significant role in enhancing and streamlining the e-invoicing process. The integration of AI technologies with e-invoicing systems offers several benefits and opens up numerous future possibilities. Here's a breakdown of the current applications and potential future uses:

**Current Applications**

+ Automated Data Capture and Entry: AI algorithms are capable of extracting data from various invoice formats automatically, reducing the need for manual data entry. This not only speeds up the process but also minimizes errors.

+ Fraud Detection: By analysing patterns and anomalies in invoicing data, AI can help identify potential fraud. This includes detecting duplicate invoices, irregular transactions, and other suspicious activities that might indicate fraudulent behaviour.

+ Compliance Monitoring: AI systems can be trained to understand and monitor compliance with local tax laws and regulations related to invoicing. This helps businesses stay compliant and avoid penalties.

+ Process Optimization: AI can analyse invoice processing workflows to identify bottlenecks and inefficiencies, suggesting improvements or automating certain steps to enhance overall efficiency.

+ Predictive Analytics: By analysing historical invoicing data, AI can provide insights into future trends, such as predicting cash flow issues or identifying opportunities for early payment discounts.

**Possible Future Applications**

+ Enhanced Natural Language Processing (NLP): Future advancements in NLP could enable AI systems to understand invoices written in natural language, further reducing the need for human intervention in data extraction and processing.

+ Smart Contracts Integration: Integrating AI with blockchain technology and smart contracts could automate the entire invoicing and payment process, making transactions more secure, transparent, and efficient.

+ Dynamic Pricing Models: AI could enable dynamic pricing strategies where the invoicing system adjusts prices in real-time based on demand, availability, customer relationship, and other factors.

+ Autonomous Dispute Resolution: AI systems could handle disputes over invoices by analysing contract terms, service delivery proofs, and communication between parties, suggesting or even implementing resolutions without human intervention.

+ Predictive Supplier and Customer Management: AI could predict supplier or customer behaviours, such as risk of late payment or likelihood of order cancellation, allowing businesses to proactively manage relationships and finances.

+ Global Tax Compliance: As businesses expand globally, AI could help manage the complexity of adhering to diverse tax laws and invoicing regulations across different countries, automatically updating systems as laws change.

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The integration of AI into e-invoicing represents a significant step towards digital transformation in finance and accounting. As AI technologies evolve, they will continue to revolutionize the invoicing landscape, making processes more efficient, secure, and user-friendly.

### 3.6.4 Blockchain: Integrating Conventional and Decentralised Financial Systems

In the 2019 billentis report, the future impact of blockchain technology was still uncertain—potentially a pivotal innovation or merely a fleeting trend. However, developments since then have signalled its increasing acceptance and integration into mainstream finance. Notably, in January 2024, the U.S. Securities and Exchange Commission approved several Crypto-ETFs, enhancing their appeal to institutional investors [23]. Earlier, in May 2023, the European Parliament ratified the Markets in Crypto-Assets Regulation (MiCA), establishing a regulatory framework across Europe that promotes the innovative use of crypto-assets while ensuring financial stability and protecting investors. Furthermore, the introduction of the pan-European Blockchain Regulatory Sandbox in 2023 has facilitated ongoing dialogue between blockchain practitioners and regulators, aiming to resolve pertinent legal and regulatory issues [24]. These initiatives collectively demonstrate a committed trajectory for the evolution of blockchain technology.

Despite these advances, the journey has encountered obstacles. In 2023, the TradeLens joint venture, a blockchain-enabled digital platform for global trade launched by IBM and A.P. Moller-Maersk in 2016, was discontinued due to financial untenability. Concurrently, similar blockchain-based trade finance platforms, we.trade and Contour, also ceased operations, followed by the insolvency of the Marco Polo Network in 2023.

Nevertheless, the institutional perspective on blockchain remains positive. A prime example is the 'safe Financial Big Data Cluster (safeFBDC)' project, supported by the German Federal Ministry for Economic Affairs and Climate Action. As part of this initiative, Fraunhofer Institute for Material Flow and Logistics IML, has developed blockchain applications that enhance supply chain financial resilience and efficiency. These applications use smart contracts for autonomous invoicing and tokenize trade receivables, which facilitates sophisticated invoicing processes, programmable payments, and the foundation for AI-enhanced financial analysis and risk management [25].

As the technology and its regulatory environment mature, blockchain's role in asset tokenization is poised to significantly alter financial market infrastructures. Tokenization makes both tangible and intangible assets tradable on blockchain via smart contracts, encapsulating ownership in digital form. This innovation is pivotal to the rise of Decentralized Finance (DeFi), which offers an accessible, open financial system through decentralized networks. DeFi replicates traditional financial services such as lending, exchanges, and insurance, utilizing smart contracts executed by blockchain networks to maintain integrity and global synchronicity [26]. The assets managed in DeFi smart contracts surged from under $1 billion in early 2020 to over $45 billion by the end of 2023 [27].

The synergy between asset tokenization and DeFi is set to drive forward the adoption of blockchain, enhancing the stability and liquidity of the crypto ecosystem with secure, real-world collateral. This integration is essential for the advancement of decentralized blockchain-based financial systems and will play a crucial role in future blockchain-enabled business ecosystems. Properly structured electronic invoice information remains a critical component for all related applications, ensuring efficient operation and compliance in this evolving space.

### 3.7 Organisations Boost Environmental, Social and Governance (ESG) Performance through Strategic E-invoicing Transition

Environmental, Social, and Governance (ESG) constitutes a paradigm through which investors and corporations assess the operational impact of a business within the broader environmental and societal frameworks. Electronic invoicing significantly enhances the ESG values, align-

ing with overarching objectives of sustainability and ethical corporate conduct. While the environmental advantages are the most apparent, e-invoicing also substantially contributes to social and governance improvements. Consequently, organizations may leverage the transition to e-invoicing as a strategic measure to bolster their ESG performance and reporting.

The **environmental implications** of invoicing are significantly influenced by considerations surrounding their carbon dioxide ($CO_2$) emissions. The assessment of a paper invoice's $CO_2$ footprint necessitates a comprehensive analysis encompassing the entire lifecycle of the invoice, from paper production through to its final delivery to the recipient. Key factors include:

+ Invoice Production:
  - Paper Type: The use of recycled paper is associated with lower $CO_2$ emissions in comparison to virgin fiber paper.
  - Energy Source: Employing renewable energy sources, such as wind or solar, during the manufacturing process markedly diminishes the $CO_2$ footprint relative to the utilization of fossil fuels.
  - Manufacturing Efficiency: Advanced, efficient manufacturing facilities are capable of reducing energy consumption and consequently, $CO_2$ emissions.
  - Materials: The environmental impact assessment extends beyond the paper itself to include related materials such as envelopes and stamps.
  - Number of Sheets: The average number of sheets per invoice also affects the $CO_2$ calculation. This average can fluctuate based on the customer type (Business-to-Business (B2B) vs. Business-to-Consumer (B2C)) and varies across different sectors (e.g., telecommunications/utilities vs. industry). It is posited by various stakeholders within the e-invoicing sector that the average is approximately 2.5 pages per invoice.

+ Printing of invoices:
  - Digital Printing Efficiency: Employing digital printing techniques can enhance efficiency over conventional printing methods, particularly for smaller quantities.
  - Ink Selection: The environmental impact, including the carbon footprint, is influenced by the choice of ink, such as oil-based versus water-based. The environmental detriment arises from the harmful chemicals in printer ink, the non-degradable plastic components, and petroleum oil in some ink and toner cartridges, leading to significant pollution when they reach the end of their lifecycle. Often disposed of in landfills or aquatic environments, these cartridges release toxic metals and volatile organic compounds (VOCs), causing extensive soil and water contamination. Presently, less than 30% of these cartridges are recycled [28].

+ Invoice Processing and Administration:
  - Efficiency of Office Appliances: Utilizing energy-efficient machinery for invoice preparation tasks like folding, enveloping, and sorting can contribute to the reduction of carbon emissions.
  - Administrative Energy Use: The energy expended in the invoicing process, particularly through computer systems, and the additional time required for processing paper invoices, should be factored into the carbon footprint calculation of the personnel involved.

+ Transportation and Delivery:
  - Transportation Method: The choice of transportation, with air freight markedly increasing carbon emissions in contrast to alternatives like trucks, trains, or ships.
  - Transportation Distance: Carbon emissions are also dependent on the distance between the printing facility and the invoice recipient.

- Delivery Efficiency: Enhancing the efficiency of the last-mile delivery, especially in urban areas through the use of low-emission vehicles (for instance, electric cars or bicycles), can mitigate emissions.

+ Disposal and Recycling:
  - Recycling Practices: The potential for recycling used paper can significantly decrease the overall carbon footprint of an invoice, as recycled materials necessitate fewer resources for the production of new paper goods.
  - Disposal Methods: The technique employed for the disposal of paper invoices (e.g., landfill versus incineration) influences the carbon balance.
  - Digital Archiving: Adopting electronic invoicing eliminates the need for physical archiving, thereby saving on the energy and space required for storage.

Determining the exact carbon dioxide ($CO_2$) footprint of a paper invoice requires a comprehensive analysis of various factors, encompassing the emissions from production, printing, shipping, and disposal processes. Given the complexity of quantifying several of these elements, numerous studies have concentrated solely on the emissions saved by foregoing paper.

The $CO_2$ emissions associated with producing one kilogram of paper can significantly fluctuate based on the paper type, raw material sources, manufacturing process, and the energy utilized during production. Typically, paper production entails tree harvesting, transportation, pulping, paper manufacturing, and, in some cases, recycling—each phase adding to the total $CO_2$ emissions.

The carbon footprint of paper is commonly estimated to range from 1.45 kg to 3.6 kg of $CO_2$ per kilogram of paper, reflecting the diversity in production techniques. Recycled paper generally exhibits a lower carbon footprint compared to virgin fibre paper. The lower end of this spectrum is indicative of modern, efficient, and environmentally friendly production methods that often leverage renewable energy and a greater proportion of recycled content. Conversely, the higher end may reflect less efficient production methods, reliance on fossil fuels, and the use of virgin wood fibres.

Adopting a conservative estimate of 2 kg $CO_2$ per kilogram, the $CO_2$ footprint for a single 20g paper invoice would be approximately 40g. This figure acknowledges that the $CO_2$ footprint from electronic invoicing is not sufficient to offset the emissions from printed invoices other than paper production (including transport, ink, archiving), thus maintaining the 40g $CO_2$ estimate as a cautious approach.

Furthermore, the conservation of paper also contributes to the preservation of trees, which are capable of sequestering additional $CO_2$. On average, a mature pine tree, commonly utilized in paper production, can yield about 8,333.3 sheets of standard office paper [29]. However, this simplistic calculation does not account for the complete lifecycle of paper production, including yield loss during processing, the incorporation of recycled paper, and variances in tree size and type. Therefore, the actual figures may significantly differ. Assuming an invoice uses an average of 2.5 pages, approximately 3,000 invoices equate to the usage of one tree.

The capacity for $CO_2$ absorption by a single tree is highly variable, influenced by the tree's species, age, environment, and health. A general estimate from the United States Department of Agriculture (USDA) suggests that a mature tree can absorb about 22 kilograms of $CO_2$ annually. This average acknowledges the variability in absorption rates due to the previously mentioned factors. Based on this, 3,000 invoices, each comprising 2.5 sheets of paper, would result in the absorption of approximately 22 kg of $CO_2$ annually. Assuming a minimum lifespan of ten years for a mature tree prior to harvest, this equates to an absorption of 80 grams of $CO_2$ per invoice.

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| 120g CO$_2$ | 1.2t CO$_2$ | 120t CO$_2$ | 52.2Mt CO$_2$ | 67.2Mt CO$_2$ |
| --- | --- | --- | --- | --- |
| FROM ABSORPTION 80g | 800kg | 80t | 34.8Mt | 44.8Mt |
| FROM PRODUCTION 40g | 400kg | 40t | 17.4Mt | 22.4Mt |
| **1** invoice | **10,000** invoices | **1,000.000** invoices | **435 bn.** invoices | **560 bn.** invoices |
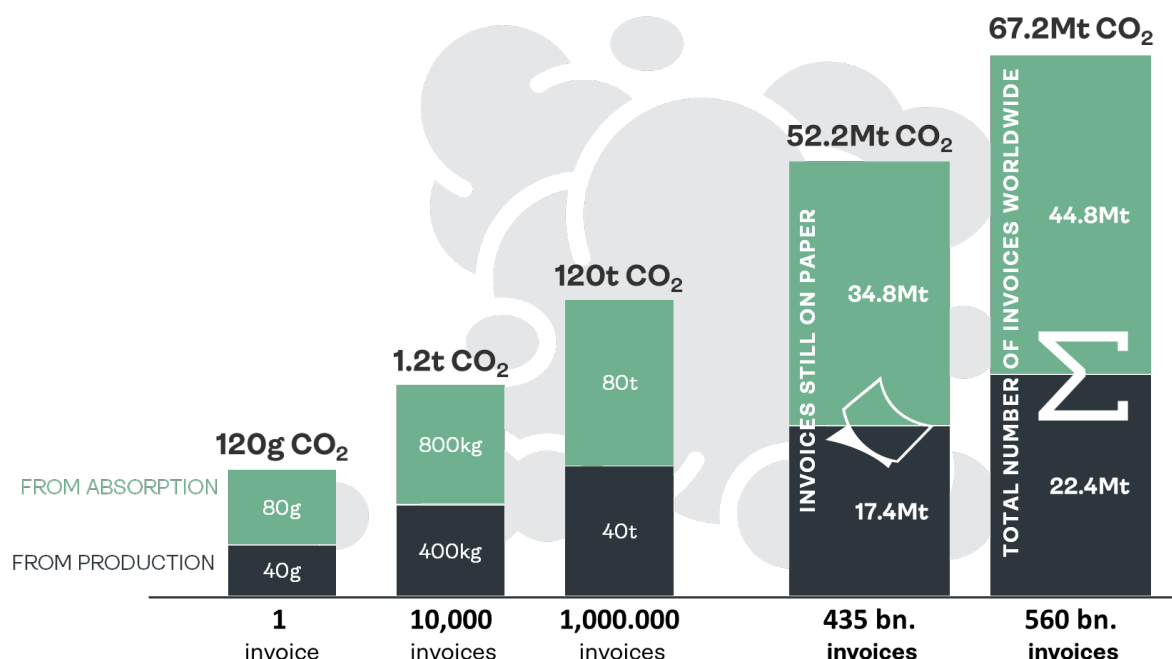
The implementation of electronic invoicing offers numerous **social advantages**, particularly benefiting Small and Medium Enterprises (SMEs) in the following ways:

+ Accessibility and Inclusivity: E-invoicing enhances accessibility for individuals and businesses globally, including those in remote or underserved regions. It facilitates quicker and more efficient transactions, bolstering the economic sustainability of SMEs and potentially aiding in broader economic growth.

+ Transparency and Traceability: Electronic invoices offer superior tracking and storage capabilities compared to traditional paper invoices, enhancing transactional transparency and facilitating easier audits and verification processes. This improvement aids in combating fraud and ensures adherence to regulatory standards, benefiting all parties involved.

+ Financial Efficiency: E-invoicing introduces significant financial benefits. Primarily, electronic invoices tend to be settled 5-7 days sooner than paper invoices, diminishing the need for external financing. This is particularly crucial for SMEs, which often face challenges in accessing financial resources. Additionally, the advent of new Invoice Finance solutions, such as those allowing for the financing of individual invoices and those not requiring a historical financial track record as they are based on approved invoices, simplifies and accelerates the financing process, making it less bureaucratic and more accessible.

+ Impact on the Shadow Economy: As outlined in previous chapters, the initiation of tax reporting mechanisms significantly boosts a country's tax revenue. This increase in revenue benefits society as a whole by potentially reducing the size of the shadow economy.

E-invoicing significantly enhances **governance benefits** across several dimensions:

+ Compliance and Standardization: It streamlines adherence to regulatory frameworks by simplifying compliance with tax laws and invoicing standards. As many jurisdictions increasingly mandate e-invoicing for tax purposes, electronic systems offer

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the flexibility to promptly adapt to legislative amendments, ensuring that governance standards are consistently upheld.

+ Improved Internal Controls: The integration of e-invoicing systems bolsters internal oversight of financial transactions. By automating invoice processing and reconciliation, it diminishes the likelihood of inaccuracies and fraudulent activities, thus ensuring more reliable financial reporting.

+ Enhanced Efficiency and Accountability: E-invoicing enables organizations to optimize their invoicing procedures, reduce administrative burdens, and enhance accountability. This automation not only leads to more efficient operations but also promotes a culture of transparency and responsibility within enterprises.

+ ESG Reporting Enhancement: An increasing number of companies are mandated to conform to ESG reporting standards. While in the UK and US, this requirement predominantly applies to capital market participants, the European Union's Corporate Sustainability Reporting Directive (CSRD) extends it to nearly 50,000 companies from January 2024. The CSRD aims to bridge the gaps in existing reporting frameworks and broaden the scope of sustainability reporting, marking the introduction of compulsory reporting standards at the EU level for the first time, thereby elevating the accountability of European businesses in sustainability matters.

The implementation of e-invoicing is particularly pivotal in this context, especially as it pertains to the intricate task of ESG reporting, which becomes significantly more demanding for SMEs. Reporting on scope 3 emissions, which necessitates integrating supplier data, presents a notable challenge. E-invoicing stands out as a crucial tool in this regard, potentially providing essential data, including the Product Carbon Footprint and Scope 1, 2, and 3 emissions according to the Greenhouse Gas Protocol. Should such information be incorporated into the European standard for e-invoicing, companies could leverage an established process to extract all requisite data, facilitating comprehensive reporting across various supply chain levels.

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## 4. The Global Market

### 4.1 Invoices and Electronic Invoice Penetration in 2024

#### 4.1.1 Total Volume of Bills and Invoices

The issuance of both paper-based and electronic bills and invoices across Europe and Latin America has been systematically recorded over multiple years. Recent disclosures of data from credible entities regarding China, coupled with robust signals from the Russian market-place, have enabled a fairly precise estimate of transaction volumes within the Asian sector. Estimations for the volumes pertaining to additional global areas have been meticulously derived through the application of critical metrics from the previously mentioned world regions.

Estimate for global bill/invoice volume 2024:

B2C/G2C
**280 billion**

B2B/B2G/G2B
**280 billion**

Estimated annual volume to be at least

**560 billion**
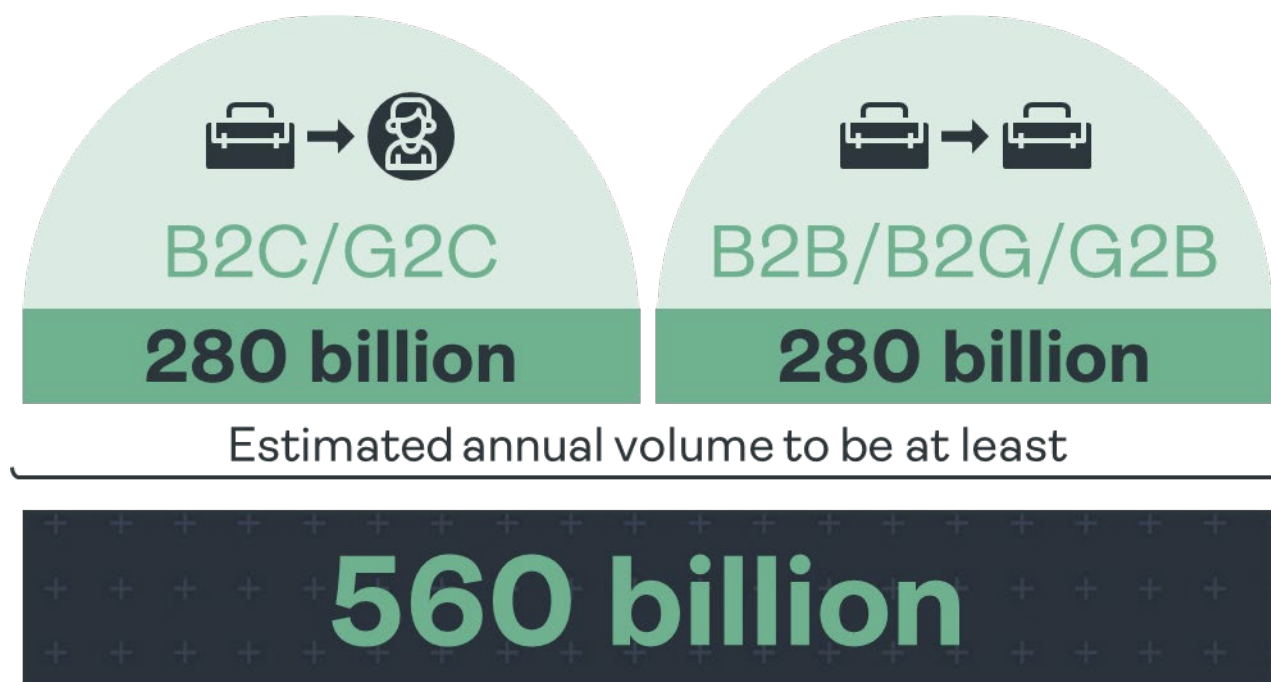
Globally, the average distribution of bills/invoices, as strictly defined legally, is about 70 per individual per year. Although metrics vary widely by region, an overall upward trend is evident.

It is projected that roughly 50% of this volume relates to service supplies, with the balance being attributed to the exchange of physical supplies.

Within the broader legal framework, the proliferation of documents resembling invoices, often referred to as 'invoice-like documents and messages', including receipts, can vastly outnumber traditional invoices, potentially by a margin of 5 to 15 times, with variations depending on the jurisdiction. We are receiving progressively accurate volume data from Latin America; however, comparable statistics from other regions remain unavailable. Consequently, we are referencing this range broadly in the document but have excluded these figures from the data presented in this chapter.

#### 4.1.2 Maturity and State of Play of Electronic Invoices

Market maturity differs across continents and within the countries of each continent.

Expected status for all bill/invoice streams - B2B, B2G, G2B, B2C and G2C -
Digitally issued by suppliers & received by buyers

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**Leaders**
**Average**
**Developing**
**Laggards**

Source: Billentis, 2024
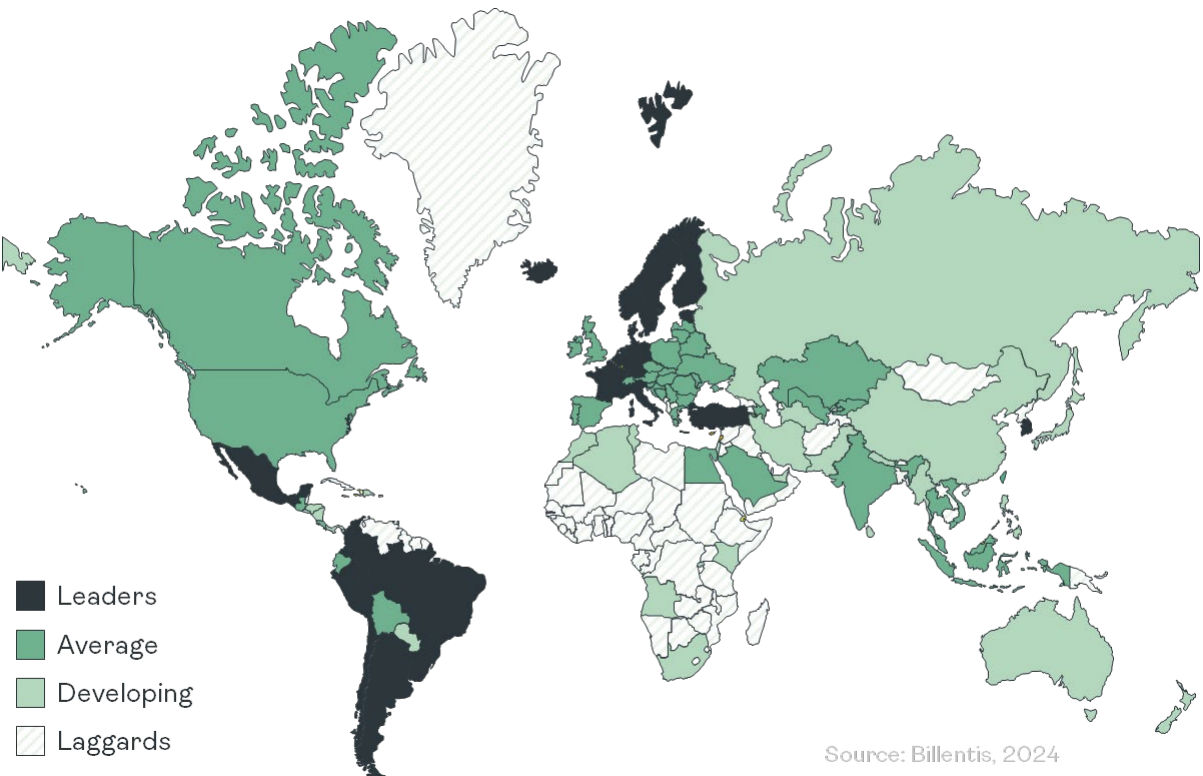
The terminology 'Laggards' depicted in the preceding chart should not be construed as indicative of a complete absence of e-invoicing initiatives in these nations. Rather, it signifies that these countries are generally at a nascent phase or are presently concentrating on specific invoicing channels. The classification 'Developing' refers to nations that have initiated e-invoicing practices, usually within the B2C domain and/or involving Electronic Data Interchange (EDI) among larger enterprises.

+
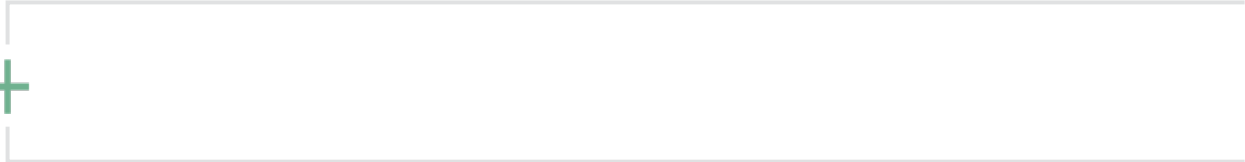
### Expected global volume of e-invoices and personalized e-receipts in 2024: 125 billion
*Strongly rounded figures*

| Recipient segment | Europe | LATAM | North America | APAC | Rest of World |
|---|---|---|---|---|---|
| 👤 Consumer | **8** (38%) *of 21* | **17** (48%) *of 35* | **7** (41%) *of 17* | **33** (17%) *of 190* | **1** (7%) *of 14* |
| 🏢 Business & Government | **11** (52%) *of 21* | **18** (51%) *of 35* | **9** (53%) *of 17* | **20** (11%) *of 190* | **1** (7%) *of 14* |

Estimated electronic volume in billion (proportion in %)
*of total invoice volume in billion*

Relative growth rates ➚

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### 4.1.3 Regions Diverge in Focus: Tax Optimization and Trade Automation Trends Vary Globally

Numerous parallels exist in the utilization of invoices globally. The endeavour to adopt electronic invoicing and persuade trading entities presents a similar challenge. Nonetheless, significant disparities arise from diverse legislation, languages, cultures, and the current emphasis on optimization. While not universally applicable across all countries and organizations, it has been determined that the focus on optimization can generally be summarized as follows:



| Focus | Description |
|-------|-------------|
| 1 | **Africa, Asia, LATAM and some European countries:** Tax authorities are initiating nationwide initiatives focused on minimizing tax evasion. These require taxpayers to submit either detailed invoice data or, at the very least, electronic invoice extracts for validation and audit purposes. In a departure from conventional paper-based methods, tax authorities are creating and instituting an entirely new framework. This introduces a CTC system for trading entities, which is relatively complex. While this transformation may not immediately enhance the efficiency of companies' internal invoice processing or the electronic collaboration between suppliers and buyers, it significantly simplifies and improves the process of VAT declarations and tax filings. |
| 2 | **North America up today:** Large and medium-sized enterprises primarily focus on optimizing their internal processes. Automation of Accounts Receivable and Accounts Payable, along with Trade Finance and Working Capital Management, are key areas of concentration. However, the market is progressively maturing, making it a ripe time to prioritize focus area three. |
| 3 | **Major parts of Europe, Japan, Southeast Asia, Pacific Region and increasingly the U.S.:** Traditional invoicing and processing techniques have not been subjected to rigorous examination; instead, they have been substituted with an equivalent functional digital alternative. Where necessary, either a portion or the entirety of the invoice details may also be shared with tax authorities. |

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| | Despite the market remaining considerably segmented, the strategy within Europe is characterized by a comprehensive and unified approach, underpinned by a pronounced willingness to cooperate among all involved parties. Furthermore, previous investments in business process automation are safeguarded. |
|---|---|

In the long term, suppliers, purchasers, and tax authorities universally seek advantages through electronic invoicing. This dynamic fosters an environment where continents may mutually benefit from shared best practices and adopt superior components from one another. Presently, there is significant momentum toward the adoption of the 5-corner model across numerous countries in Europe, the Middle East, and Southeast Asia. This movement stems from the belief that the solution should not only address the requirements of tax authorities but also establish a foundational framework for the comprehensive automation of Integrated Digital Trade.

## 4.2 Global Progress in the Adoption of Electronic Invoices and Receipts

### 4.2.1 Africa

Electronic Data Interchange (EDI) is gaining prominence within industries characterized by high volumes, such as retail, for the purpose of exchanging commercial invoices and other business communications. This adoption seeks to enhance automation and reduce operational costs. Nevertheless, adoption rates remain relatively low.

A significant challenge in many African regions involves generating tax-compliant invoices via electronic means following each sales transaction.

It's critical to acknowledge the limited digital infrastructure within these regions. Nonetheless, mobile devices are emerging as a viable foundation for many African countries, with notable acceptance within the Small and Medium Enterprise (SME) sector and amongst consumers. Digital finance and electronic point-of-sale (POS) invoicing are perceived as the most viable strategies to boost e-invoicing adoption in the African mass market. Mobile phone adoption stands at approximately 60%, while internet penetration is around 36%. Beyond mobile applications, cloud-based platforms also offer a solution for generating invoices.

The VAT compliance gap in Africa is close to 50%, as reported by the United Nations Economic Commission for Africa [30]. Consequently, approximately one-fourth of African countries have initiated or implemented electronic oversight mechanisms for business transactions. This starts with the fact that companies have to record all business transactions digitally internally. This creates the basis for transmitting relevant data to the authorities for reporting purposes. Reporting requirements often begin with transaction data generated by electronic or virtual financial devices.

**Egypt** is at the forefront in Africa regarding the implementation of e-invoicing and e-receipts. In recent years, Egypt has developed a central government platform for B2B e-invoicing and has progressively introduced it across the business sector. This system imposes stricter requirements than many other platforms abroad, necessitating Global Product Code classification for invoice content and digital signatures verified by hardware-based certificates. Furthermore, suppliers are required to generate e-receipts with QR Codes at the point of sale and submit this data to the tax authority.

The drive to combat tax fraud remains a primary motivator for the digital transformation of invoice and receipt processing in African nations. It is anticipated that an additional 25 African countries will implement Continuous Transaction Controls (CTC) systems by 2030.

### 4.2.2 The Asia and Pacific Region

Leaders in the field, such as Kazakhstan, Singapore, South Korea, Taiwan, and Turkey, have already achieved significant market adoption rates. Following their footsteps, India, Indonesia,

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Russia, Thailand, and Vietnam have embarked on nationwide initiatives. Simultaneously, various nations are either launching new endeavours or broadening the scope of their existing electronic invoicing and tax reporting projects to encompass additional user demographics.

**Australia and New Zealand** are vigorously advocating for electronic invoicing across a wide spectrum. These nations are advancing e-invoicing as a component of the Single Economic Market agenda, which is designed to enhance productivity and decrease business operational costs for both the government sector and the industry, through the establishment of an interoperable single digital economic market based on the Peppol interoperability framework. The majority of government agencies are now equipped to handle e-invoices. Moreover, both countries are proactively promoting e-invoicing within the B2B sector, with a B2G mandate also anticipated in the foreseeable future.

**China**, the nation with the highest volume of invoices, sees over 200 billion invoices generated annually, as per local reports. In 2021, a national service platform for electronic tickets and unified invoices was inaugurated. The introduction of the fully digitalized special e-fapiao represents the Chinese government's latest initiative towards the digital enhancement and intelligent overhaul of tax collection and administration processes, aiming to lower the cost of tax management. By the end of 2023, all Chinese provinces had rolled out their e-fapiao programs, setting the stage for enterprises to eliminate paper invoices and streamline their invoice processing workflows. A nationwide B2B mandate is expected by 2025.

The **Gulf region** is poised to become a global focal point for CTC and e-invoicing projects in 2024 and 2025. In 2024, Saudi Arabia is continuously extending its e-invoicing mandate to encompass companies with revenues ranging from SAR 25 to 30 million (approximately 6.2 to 7.4 million Euros). The governments of Bahrain, Jordan, Oman, and the UAE are also advancing their respective projects.

In recent years, **India** has expanded its e-invoicing mandate. Companies with revenues exceeding INR 50 million (approximately 0.55 million Euros) are now mandated to submit B2B e-invoices to the Goods and Services Tax Network (GSTN). It is anticipated that this requirement will extend to B2C invoices by 2026 or 2027.

Since July 2016, nearly all taxable entrepreneurs in **Indonesia** are obliged to issue their VAT invoices (Faktur Pajak, FP) electronically and complete tax payments exclusively online. On the purchasing side, the received e-invoice must be validated either through the VAT input feature in the e-invoice application or by scanning the invoice's QR code. Nonetheless, it is common practice for many buyers to request a paper version of the Faktur Pajak from suppliers before proceeding with payment, ensuring that the Faktur Pajak has been duly reported to the Indonesian tax authority.

In 2023, **Japan** introduced a new so-called Qualified Invoice System, facilitating the acceleration and automation of business processes. The 'E-Invoice Promotion Association' (EIPA) was established with the goal of developing and promoting a standardized e-invoicing interoperability framework based on Peppol, leveraging the usage of the qualified invoices.

The **Malaysian** government has imposed centralised e-invoicing CTC mandates for B2B, B2C, and B2G transactions, with a phased implementation commencing in the second half of 2024. By mid-2025, all taxpayers are expected to fall in the obligation. In parallel MDEC (Malaysia Digital Economy Corporation) has been given the responsibility to define local Peppol specifications and technical standards and to accredit Peppol service providers and Peppol-ready solution providers, in order to foster the commercial uptake of e-invoicing in Malaysia. In addition the agency is overseeing compliance with the overall framework.

**Pakistan** is in the process of introducing a combination of centralized e-invoicing and fiscal systems or registers for B2B and B2C invoicing, respectively [31].

During a pilot phase in 2022, approximately 100 large taxpayers in the **Philippines** partici-pated in testing the e-invoicing/e-reporting program, which is modelled after South Korea's e-Tax invoice system.

### 4.2.3   North America

In the business-to-business (B2B) and business-to-government (B2G) sectors, the strategies and goals widely vary from those observed in European and Latin American contexts. Pres-ently, U.S. companies are prioritizing the enhancement of internal processes, specifically in the areas of 'order-to-cash and accounts receivable (AR) automation' along with 'purchase-to-pay and accounts payable (AP) automation'. Research indicates that the United States has moved beyond the initial stages of adopting electronic invoicing, with a growing interest in this area.

Because the U.S. does not have VAT, but a sales tax system, invoices are not considered any different from other business documents. This has delayed the acknowledgment of the bene-fits provided by e-invoicing network operators within the U.S. market. However, a steady in-crease in the number of such operators is now anticipated. International corporations operat-ing in the U.S. are mandated to adhere to local regulations, often engaging third-party service providers for compliance.

There is a scarcity of surveys that include or relate to e-invoicing, with most concentrating on the AP aspect and largely targeting significant enterprises.

The findings from various sources for larger corporations are summarized as follows:

+ Approximately two-thirds of businesses send invoices as PDFs via email, but less than 20% dispatch structured e-invoices through Electronic Data Interchange (EDI). Major suppliers are either willing or obliged to transmit electronic files in the format pre-ferred by their customers, establishing connections on an individual basis. These sup-pliers do not show a preference for any particular network, being part of many.
+ Over half of the invoices are still received in unstructured formats, such as paper or PDF, making the extraction of data from machine-readable PDFs increasingly popular.
+ Supplier portals have been established.
+ Commercial Cards, including purchasing cards, ePayment, and virtual cards, are exten-sively used for high-volume, low-value purchases, with a moderate trend of increase and expansion into high-value transactions.
+ The use of third-party services, such as e-invoicing networks or Software as a Service (SaaS) platforms, is growing, offering substantial cost savings over significant in-house investments.
+ There is a noticeable trend towards invoice financing and novel payment solutions.

It is important to note, however, that the majority of U.S. businesses employ fewer than 500 people, and their practices and preferences are not adequately represented in findings as mentioned above. Should the market trends align with those in other countries, a significant surge in the adoption of third-party cloud services is anticipated.

Outside of North America, tax authorities and the public sector play a significant role in driving e-invoicing adoption, a trend not as prevalent in North America despite the U.S. Federal Ad-ministration's previous announcement of an e-invoicing mandate. Following a pilot program that evaluated the advantages and feasibility of e-invoicing within the public sector, the Office of Management and Budget issued a directive for federal agencies to transition to electronic invoicing. The goal was for these agencies to start processing all invoices electronically by the end of the 2018 fiscal year. Although digitalization has begun within federal administration, it has yet to significantly influence B2B e-invoicing as seen with B2G mandates in Europe.

To facilitate the increase in B2B efficiency, the Federal Reserve initiated a program aimed at boosting e-invoice adoption across U.S. businesses of all sizes. This initiative led to the estab-lishment of the DBNA.

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The market evolution in Canada mirrors that of the U.S.

### 4.2.4   Latin America

Chile is recognized as the foundational model for market development in Latin America, serving as a pivotal influence on regional market structures. Brazil and Mexico, as early adopters, have seen some markets surpass Chile, attributed to their rigorous enforcement of electronic invoicing regulations. Concurrently, the vast majority of Latin American nations are undergoing swift evolution in this arena.

The **Argentine** tax authority, AFIP, instituted a compulsory e-invoicing mandate across all economic sectors in the spring of 2019, marking a significant shift towards the obligatory widespread adoption of e-invoicing through the Electronic Invoice Issuance System (RECE) from April 2019.

**Brazil** mandates e-invoicing for all businesses, with approximately 2.1 million entities issuing e-invoices for goods, a testament to the effective implementation of these requirements years prior. Brazil's innovation extends to retail users through the NFC-e project, offering an electronic solution alternative to traditional fiscal printers. This project aligns with Brazil's broader commitment to electronic reporting and auditing, increasingly incorporating comprehensive tax-relevant documentation and operational tracking.

**Chile** was and still is a very innovative country. After several years of following a voluntary approach, the tax authority meanwhile declared electronic invoicing as mandatory for all businesses. Where it is not uncommon to declare the issuance of e-invoices, Chile is more advanced than the average also to consider the receipt of e-invoices. In 2018, the government also launched an innovative mobile app that permits the issuance and validation of e-invoices.

**Bolivia** initiated its VAT e-invoicing rollout in 2021, with successive taxpayer groups being incorporated in 2024 and 2025.

**Colombia** began its e-invoicing mandate for large businesses in 2018, entering a transitional phase in 2019-2020, culminating in a requirement for all businesses to issue pre-validated electronic sales invoices from August 2020.

**Mexico** leads globally in the digitization of tax-relevant processes, exchanging approximately 10 billion e-invoices annually. It has expanded its digital efforts to include mandatory e-accounting for businesses and individuals, significantly reducing tax evasion through comprehensive digital tracking and reporting.

**Peru's** approach to e-invoicing aligns with international standards, facilitating integration with European Union and APEC trading partners. Its system resembles Brazil's, incorporating shipping documents into its electronic invoicing process.

In **Latin America**, governmental initiatives primarily drive market activities towards e-invoicing, aiming to reduce tax evasion through immediate or near-immediate invoice validation. Despite stringent legal requirements, several Latin American countries have emerged as global leaders in e-invoicing adoption, inspiring nations abroad.

Key characteristics of electronic invoicing practices within Latin American countries include:

+   Mandatory allocation of unique and sequential invoice numbers (folios) by the tax authorities.
+   Utilization of digital signatures, authenticated through certificates issued by recognized or government-operated Certification Authorities.
+   Enforcement of standardized XML formats for obtaining clearance from the tax authorities.

+ Compulsory submission of reports to the tax authorities, which must be done in real-time before the invoice is issued or, at the very least, on a monthly basis.
+ Inclusion of traditional invoices and other fiscal documents such as credit notes, debit notes, and receipts (also referred to as 'boletas de ventas' or 'tickets') in the e-invoicing system.
+ Enhanced integration with the physical supply chain, including the simultaneous printing of auxiliary transportation documents based on a pre-authorized invoice.
+ Upon reviewing and approving suppliers' invoices, tax authorities may apply a visible 'stamp' on the generated PDF invoices. This 'stamp' could be a country-specific alphanumeric code or a barcode/QR code. Alternatively, a verifiable electronic token, such as a digital signature, might be added to the structured invoice file.
+ Invoice recipients are frequently required to verify that the invoice has been pre-approved by the tax administration.
+ Tax authorities either validate invoice data in real-time or employ data-mining techniques for subsequent invoice verification.
+ A general requirement for the archiving period of invoices is set at five years.

Service providers play a crucial role in facilitating these regulated functions, with many operating across multiple Latin American countries and processing significant invoice volumes. These providers not only comply with local regulations but are also expanding into the American and European markets.

### 4.2.5  Europe

At the turn of the millennium, legislative frameworks across nearly all European nations had already embraced electronic invoicing, leading to an accelerated adoption of e-invoicing by businesses, surpassing adoption rates in other global regions.

European Union regulatory bodies primarily focused on eliminating legal barriers to e-invoicing, initiating standardization projects, establishing the Peppol interoperability framework, and advancing Business-to-Government (B2G) e-invoicing. In this context, approximately 300,000 public entities were mandated a few years back to upgrade their systems and workflows in order to accommodate standardized e-invoices. Subsequently, several nations have progressed to mandating e-invoicing for transactions with the public sector by suppliers.

Current developments like ViDA are aimed at combating VAT fraud within the EU through future reporting of invoice data to tax authorities. This measure also seeks to streamline business processes for taxpayers across a diverse and international context, a notable challenge given the distinctive composition of the European market. The complexity of the European market is underscored by its:

+ Over 40 countries, including 27 European Union members,
+ More than 40 legal frameworks,
+ Over 100 languages, and
+ In excess of 22 million Small and Medium-sized Enterprises (SMEs).

The fragmented market structure has posed significant challenges for companies, leading to a preference for utilizing cloud services or external service providers for e-invoice processing and Business-to-Business/Government (B2B/B2G) exchange. Currently, approximately 1,000 service providers are operational within Europe, handling over more than half of all B2B/B2G e-invoice transactions. The volume of e-invoices processed through these providers has seen a higher growth rate than direct data exchange for about the past five years, a trend expected to notably increase in the forthcoming years.

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| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 (E) | 2024 (E) |
|---|---|---|---|---|---|---|---|---|---|---|
| B2B Supplier/Buyer Direct | 2170 | 2410 | 2660 | 2880 | 3030 | 3150 | 3510 | 3900 | 4300 | 4590 |
| B2B via Service Provider | 1980 | 2300 | 2640 | 2980 | 3990 | 4030 | 4450 | 5000 | 5590 | 6120 |
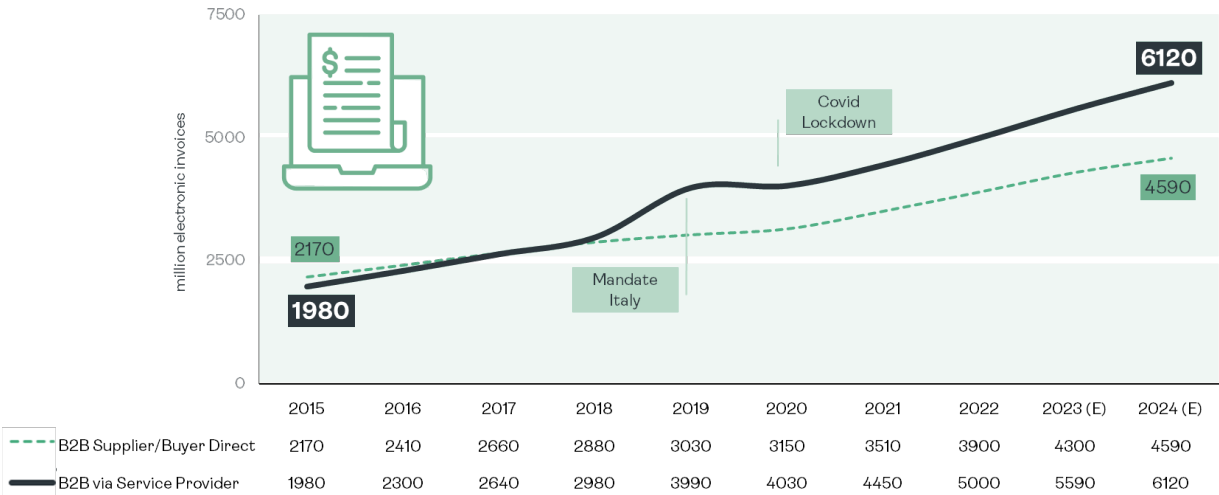
Regulatory bodies aim to safeguard the investments made by taxpayers and service providers while accommodating the current landscape. Their initiatives significantly contribute towards achieving mutually beneficial outcomes for both tax authorities and taxpayers. There are established standards for electronic invoicing and interoperability networks for the transmission of business messages such as GENA and Peppol have been operational for some time already. The pan-European project ViDA (VAT in the Digital Age) marks a significant step forward in advancing intra-community electronic invoicing and tax reporting.

The market harmonization through community projects is a gradual process. Consequently, several European nations have leveraged their flexibility to either adopt or are in the process of adopting legislative measures for electronic invoicing and reporting for domestic transactions.

Our database provides valuable insights into the adoption rate of paperless invoicing in European countries for the year 2024:

## B2B/B2G/G2B

## B2C/G2C



- >55%
- 40-55%
- <40%
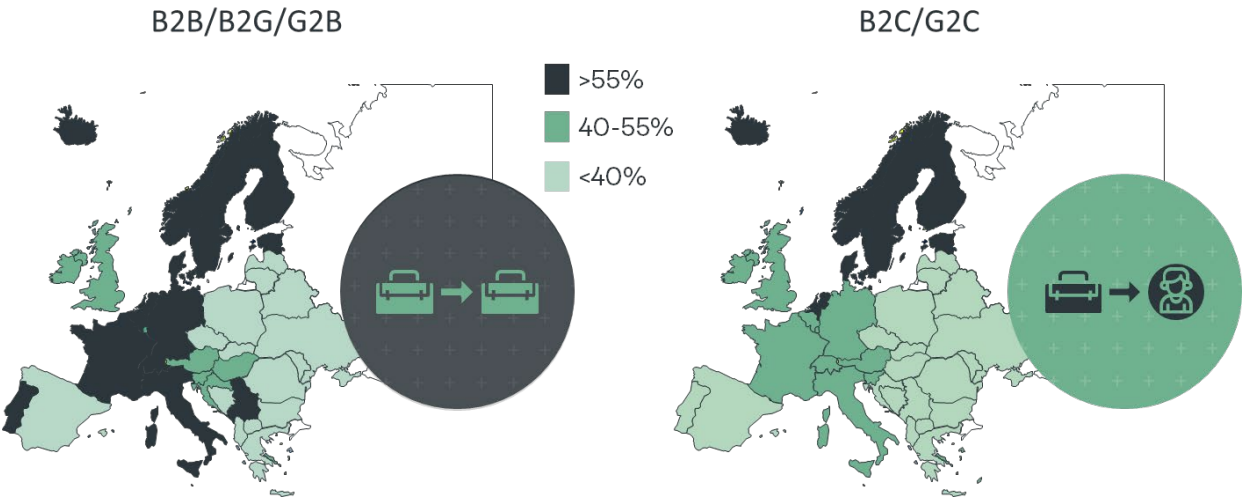
In addition to this current status, the outlook for the coming years should be more interesting:

**Belgium** has enacted a comprehensive B2G e-invoicing mandate, with a B2B mandate scheduled for 2026. Similar to practices in other European countries, businesses are required to prepare their systems for receiving and issuing structured e-invoices. While an e-reporting requirement for invoice data is not yet planned for this phase, it is expected to be implemented by the time the ViDA deadlines are established.

In **France**, a complete B2G e-invoicing mandate has been implemented across all governmental levels, with the initial phase of a B2B mandate set for 2026. By Q4, all French companies should be capable of receiving e-invoices, with large and mid-sized companies also issuing them. The obligation extends to small and micro businesses in 2027. The e-reporting of invoice data is an integral part of the B2B mandate from its inception, rolling out with the same deadlines.

**Germany** has B2G e-invoicing mandates targeting the federal administration and the majority of the states. A B2B e-invoicing framework was adopted as part of the Opportunity Growth Act in the beginning of 2024. Starting in 2025, all businesses must be 'e-invoicing ready' to receive and process e-invoices in a structured format based on the European Norm. From 2027, companies with revenues exceeding 0.8 million euros, and from 2028 all businesses, will be required to issue structured e-invoices. The timeframe for the tax reporting of invoice data is to be determined later, most likely aligned with the ViDA deadlines.

**Italy** stands as the pioneer in European B2G e-invoicing, having mandated B2G e-invoicing across all governmental levels for nearly a decade. Since 2019, the B2B mandate has been progressively implemented, now encompassing the majority of businesses for both issuing and receiving e-invoices. The government employs a centralized pre-clearance model.

**Poland** has had an electronic reporting model for invoice-related data for several years. The initiation of a comprehensive B2B mandate was initially slated for 2024 but has been postponed to February 2026 for taxpayers whose turnover exceeded PLN 200 million in the previous year and to April 2026 for all remaining taxpayers.

**Romania's** e-invoicing system necessitates the pre-clearance of B2B e-invoices via the central government platform. The first half of 2024 serves as a transitional phase for the invoicing mandate in the form of e-reporting, with the RO e-invoice system becoming fully operational for sending and receiving invoices in July 2024, eliminating the acceptance of paper invoices for tax compliance.

**Spain** has implemented a nationwide B2G e-invoicing mandate. Previously, the tax authority introduced the SII electronic invoice data reporting system for both issuers and recipients. A B2B e-invoicing mandate is under consideration, with a draft law already in circulation. In the initial phase, businesses with revenues exceeding 8 million euros will be implicated, followed by all other taxpayers 12 months later, with a potential start in the summer of 2025.

The **UK** maintains a comparatively liberal market, allowing the private sector to evolve the electronic invoice market. Until 2019, the development in the B2G sector aligned with EU strategies, with central government departments supporting the EN16931 e-invoice standard and the National Health Service adopting the Peppol interoperability framework. The 'Making Tax Digital' initiative aims to digitize the tax system, requiring digital record-keeping and the use of compliant software, thereby narrowing the tax gap and bringing tax reporting closer to real-time.

Additionally, several **smaller European countries** are adopting or planning to implement B2G and digital record-keeping requirements within the next three years.

### 4.3    Market Predictions for 2024-2028

### 4.3.1    Expected E-invoice Volume Growth

In light of the accelerating market dynamics within several major Asian countries, we recognize that the integration of electronic Point of Sale systems and mobile invoicing solutions (e-receipts) is set to substantially increase transaction volumes in the coming years. This surge is anticipated to significantly affect overall metrics, with projections suggesting that global e-receipt volumes may equal those of e-invoices by 2027. Predominantly, this expansion is expected to occur within the Business-to-Consumer (B2C) sector, although notable growth is

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also anticipated in the Business-to-Business (B2B) space. The anticipated growth in the B2B sector will primarily be propelled by forthcoming regulations already disclosed in approximately 40 countries globally.

Due to the absence of qualified and localized projections for e-receipt volumes, we are currently unable to provide precise forecasts for this category and will instead continue to concentrate on traditional e-invoices.

With respect to e-invoices, we anticipate the following **global volume trends**:
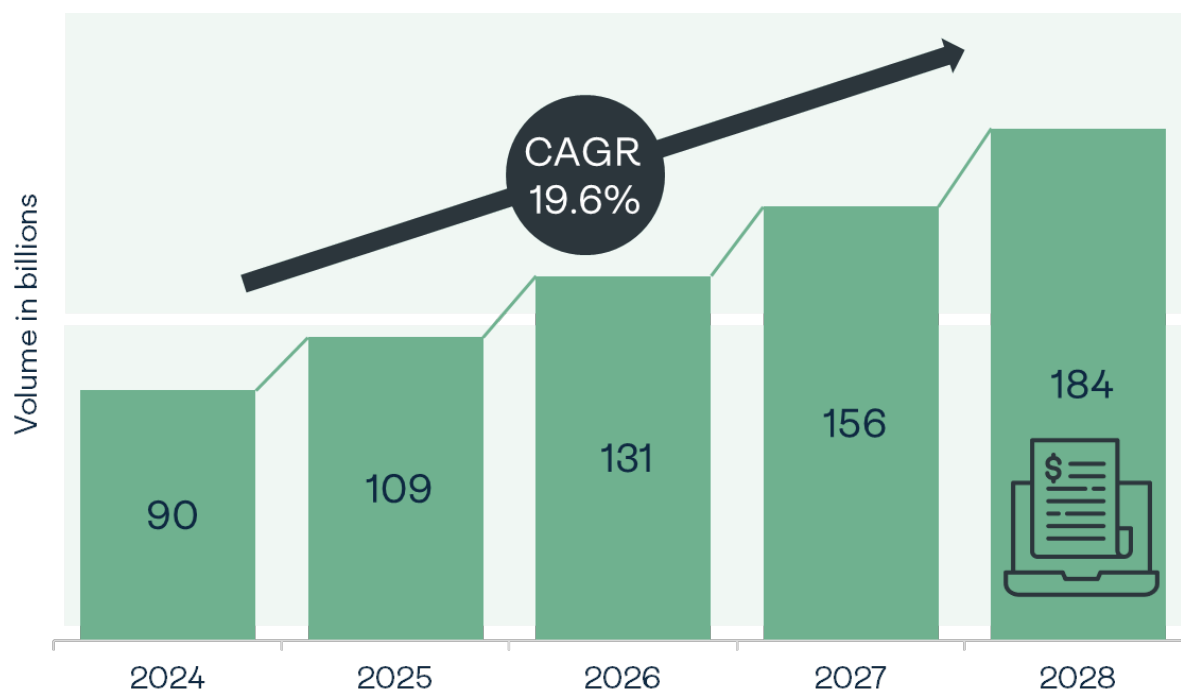


### 4.3.2   Increasing Value of the E-invoicing Market

The electronic invoicing sector has established itself over the past two decades, with digital documents progressively supplanting traditional paper invoices. Initially, the growth of the e-invoicing market in Europe was predominantly spearheaded by the private sector. Subsequently, it expanded on a global scale, particularly within high-volume industries. Presently, the expansion is primarily driven by an increasing mandate from governments worldwide for organizations to adopt electronic invoice exchanges. Notably, Latin America leads in this adoption, with significant progress also observed in various European and Asian countries. This global trend is accelerating the growth of the market for e-invoicing solutions and integration services, fuelled by additional governmental requirements.

**billentis estimates that the size of the global e-invoicing and enablement market in 2024 is EUR 8.3 billion (USD 8.9 billion), and that it will reach approximately EUR 22.2 billion (USD 23.7 billion) in 2028 (CAGR 27.9%).**

It is projected that by 2028, numerous nations in Asia and Europe, will have implemented a CTC model. Generally, this will involve requiring the exclusive use of electronic formats for domestic business-to-business (B2B) invoice exchanges. Furthermore, it is anticipated that a substantial portion of previously generic receipts will be upgraded to comprehensive invoices. This forecast encompasses solutions and services directly associated with e-invoicing, as delineated in this analysis, including but not limited to exchange networks, communication gate-

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ways, Software as a Service (SaaS), Platform as a Service (PaaS), initial setup costs, and directly related value-added services such as data validation, formatting, and synchronization. It is important to note that this projection excludes workflow or archival solutions and the processing of invoice-related data (e.g., purchase orders, catalogues, sourcing, and payment).

Looking ahead, the solution and service market for electronic invoicing and tax reporting presents a lucrative opportunity with steady growth potential in the forthcoming years. However, it is crucial to acknowledge that **market values and growth rates** significantly vary across different global regions:
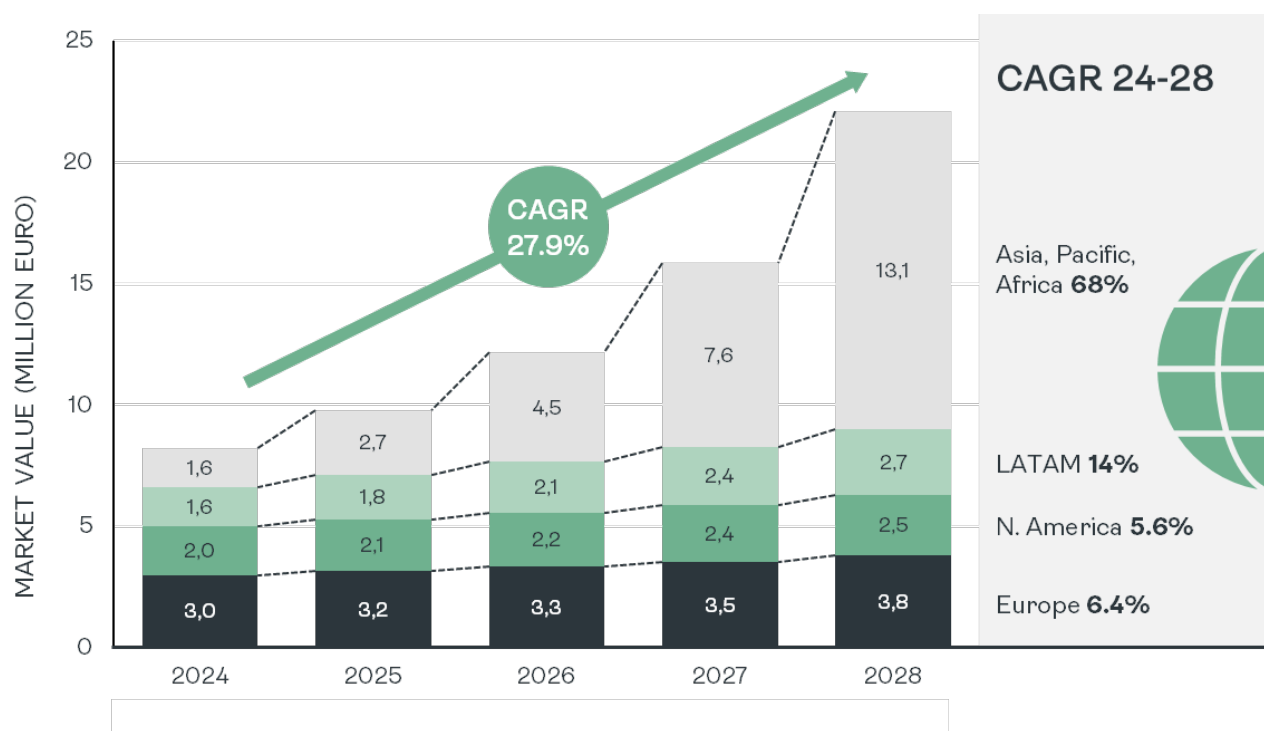


Asia, Africa, and Latin America are projected to experience the highest annual growth rates. Currently,

Europe has the largest market value, but annual growth rates are expected to be only single digits until 2028. This moderation in growth can be attributed to Europe's already mature market conditions. Additionally, a significant factor is the potential decrease in transaction prices, given that the current average cost of transmitting an e-invoice in Europe is substantially higher than the global average. This discrepancy arises from Europe's highly fragmented market, characterized by a multitude of small-scale providers primarily serving national markets, and the diversity in languages, legislations, and standards. Conversely, jurisdictions adopting CTC models and mandatory e-invoicing regulations benefit from a standardized approach, which results in a larger share of electronic invoices and facilitates economical and efficient interconnectivity between e-invoicing network operators. Consequently, the average cost per e-invoice in countries with CTC models is significantly lower, typically in the low two-digit Euro cents range.

In regions such as LATAM and Asia, mandates for e-invoicing have been either implemented or announced, predominantly based on simpler CTC models. However, the revenue from transactions for solution providers began at a modest level due to the typically brief implementation timelines, leaving the optimization of business process automation for the entire trading cycle far from realized. Therefore, solution providers in these areas still possess substantial opportunities for additional revenue. Looking ahead, it is anticipated that they will enhance transaction revenue per e-invoice by delivering added value.

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# 5. Successful Implementation of E-invoicing and Integrated Digital Trade Projects

## 5.1 Holistic Assessment of Existing Prerequisites

The exchange of invoices without paper is legally authorized in the vast majority of countries globally. This enables organizations to adapt their internal frameworks and automate their operations. The strategy for implementation is influenced both by the organization's internal objectives and capabilities, and significantly by external factors.

This section aims to provide insights that will assist readers in effectively establishing or advancing their electronic invoicing and Integrated Digital Trade initiatives.

An essential initial move is to conduct a comprehensive evaluation of the current situation and needs across several areas:

+ Internal organizational and technical landscape
+ Digital collaboration with business partners
+ Regulatory requirements and compliance

### 5.1.1 Asses your Internal Organizational and Technical Landscape

In the context of large organizations, our observations have highlighted the diverse nature of customer environments, characterized by a multitude of challenges such as:

+ The presence of numerous, disparate ERP systems.
+ Decentralized processes for the issuance and receipt of invoices.
+ Lack of control and oversight over paper invoice workflows.
+ Absence of transparency in invoice processing streams, volumes, and methodologies.
+ Multiple decentralized long-term archives.
+ Ambiguity regarding the identification of original invoices versus copies.
+ Concurrent, yet isolated, initiatives across departments focused on scanning, workflow management, archiving, tax compliance and electronic invoicing.

Early adopters embarked on their journey toward electronic invoicing without a comprehensive long-term strategy. Subsequently, post-implementation, the responsibility shifted to IT departments for ongoing operational management.

Frequently, major trading partners mandate specific formats for business communications, funnelled through designated service providers. Similarly, tax regulations in various jurisdictions necessitate the use of accredited service providers for invoice data submission. Historically, IT departments have rapidly and pragmatically responded to new business and tax reporting mandates, leading to the proliferation of diverse solutions, services, and processes.

**Our analysis indicates that many multinational corporations engage with 3 to 20 distinct electronic invoicing service providers for incoming invoices. The scenario is more fragmented on the outgoing invoice and tax reporting front, with organizations navigating between 20 to 160 different platforms, services, and portals.**

Managing this complex web of heterogeneous solutions and processes poses a significant challenge in change management. Global entities are required to incorporate hundreds of new requirements annually into their systems and workflows. For medium-sized businesses, particularly those with international engagements, maintaining tax-compliant systems and processes is becoming increasingly untenable.

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+ **The deluge of new mandates is expected to continue, underscoring the need for organizations to re-evaluate their existing fragmented infrastructures to align more closely with future demands. Electronic invoicing and tax reporting should be viewed not as a project with an end date but as an ongoing journey towards full Integrated Digital Trade.**

From our consultancy perspective, we have observed that many organizations' solutions and process frameworks are not ideally positioned for future challenges. We recommend a proactive assessment and strategic realignment towards the automation of Integrated Digital Trade to ensure readiness for upcoming developments.

### 5.1.2 Digital Collaboration with Trading Partners

To enhance digital collaboration with trading partners, it is imperative to assess their capabilities and constraints.

While the Pareto Principle (80:20 rule) holds validity across various sectors, it does not generally apply to invoice flows, with rare exceptions in certain industries. A more representative scenario for inbound invoices in medium to large organizations is as follows:



# of annual invoices per supplier for inbound invoices in mid+ organizations

NB. OF ANNUAL INVOICES PER SUPPLIER
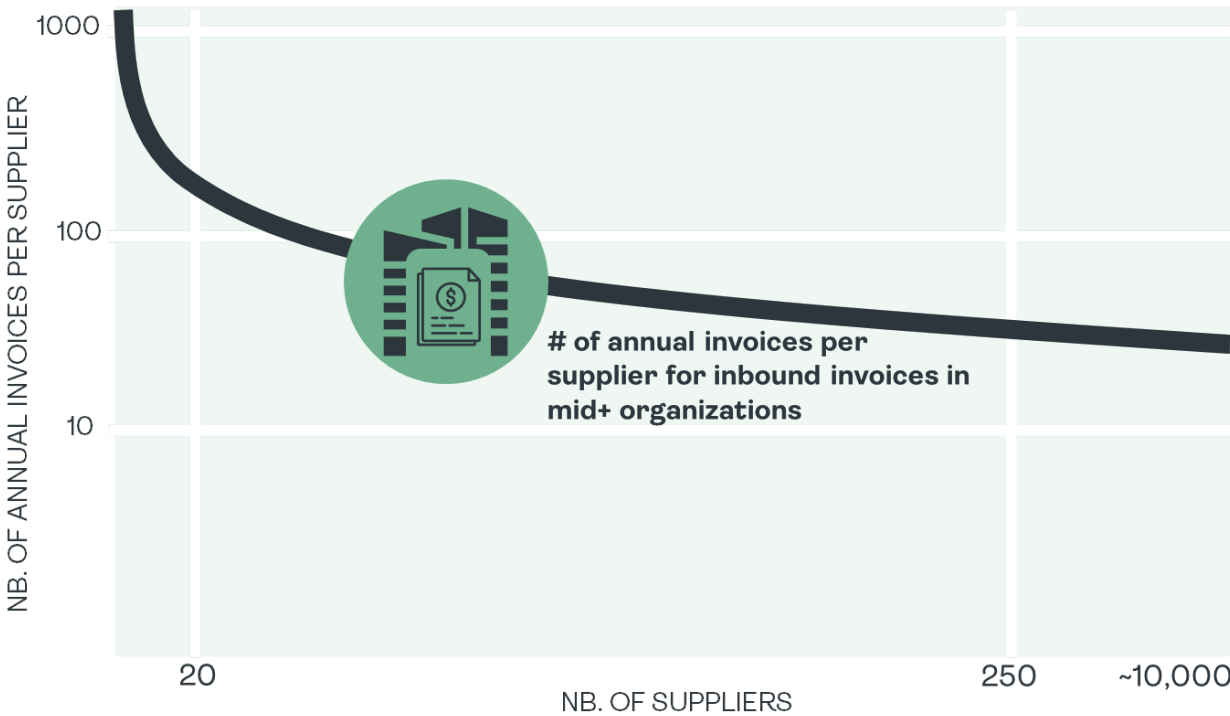
NB. OF SUPPLIERS

Typically, between 20 to 50 suppliers issue over 100 invoices annually. Around 1,000 suppliers may send between 10 to 100 invoices yearly, whereas the vast majority dispatch fewer than 10 invoices. Large corporations usually engage with approximately 10,000 suppliers and, depending on their product portfolio, a significant number of customers. Most of these suppliers and customers are small and medium-sized enterprises (SMEs) characterized by a highly fragmented IT infrastructure, with limited abilities in structured invoice data exchange and electronic archiving. Furthermore, these entities may operate across different jurisdictions, each with its unique legal requirements for tax-compliant invoicing, archiving, and adjustments for language and cultural differences.

The success of e-invoicing initiatives heavily depends on a thorough consideration of the trading partners' contexts. This includes identifying their motivations and facilitating their VAT-compliant connection in a straightforward manner.

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While large entities often seamlessly incorporate electronic invoicing into their systems, the needs of small and medium-sized businesses may vary.

Requirements of organisations:

| Size | Issuer requirements | Recipient requirements |
|---|---|---|
| **Large** | + Full ERP integration<br>+ Two-way communication<br>+ Cloud archive (sometimes shifted to inhouse in step 2) | + Full ERP integration<br>+ Two-way communication<br>+ Cloud archive (sometimes shifted to inhouse in step 2) |
| **Medium** | + Full ERP integration<br>+ Export tools (CSV, …)<br>+ Cloud archive | + Full ERP integration<br>+ Import tools (CSV, …)<br>+ Cloud archive |
| **Small** | + WebEDI (type in invoice on a portal)<br>+ Electronic forms<br>+ PDF (including several layers with image, XML data and other features)<br>+ Cloud archive | + Browser presentation & download, e.g. via home banking<br>+ PDF (including several layers with image, XML data and other features)<br>+ Cloud archive |

### 5.1.3 Legislation and Compliance

The evolving landscape of compliance and the requisite electronic submissions to tax authorities are increasingly becoming predominant. Such requirements for tax reporting are progressively being integrated with B2B e-invoicing mandates. The objective of tax authorities in developed nations is to fully digitize all documents and procedures pertinent to taxation.

For the purpose of automating business processes, organizations utilize over 150 messages, of which approximately 30 have fiscal significance and are, eventually, required for digital submission to tax authorities. A majority of business operations are either directly or indirectly influenced by tax and audit regulations. Consequently, various items listed in the forthcoming chart may be targeted for digitization and data exchange Continuous Transaction Control (CTC) models.

The digitization process encompasses numerous aspects of business, significantly impacting the handling of tax-relevant documents:

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The anticipated evolution of compliance and tax requirements is set to encompass a wide range of fiscal documents, including but not limited to invoices, payments, payment receipts, credit notes, debit notes, waybills, and monthly salary statements. Below is a comprehensive overview of the expected developments:

+ The entire lifecycle of invoices, from issuance to settlement, will be subject to meticulous tracking and tracing.
+ There is an anticipated transition from periodic post-audit reporting mechanisms towards the implementation of real-time electronic Continuous Transaction Controls (CTC) systems.
+ The obligation to participate in the electronic cycle is expected to extend to buyers, marking a shift from initial regulations that primarily targeted suppliers. This change is already being observed in multiple jurisdictions.
+ Mid-term directives will also encompass cross-border invoicing, as demonstrated by the European Union's ViDA project.
+ The scope of regulatory oversight is poised to expand to include inventory reporting, ensuring seamless integration with the physical supply chain. This entails tracking and tracing supplies from their point of entry into the domestic market or production phase through to their sale and correlating this data with Integrated Digital Trade documentation such as invoices.
+ Tax authorities in several jurisdictions are mandating that businesses utilize only accredited service providers for CTC reporting or message transmission to trade partners.

Despite potential initial hesitations regarding the adoption of an e-invoicing and e-reporting CTC model, the benefits to taxpayers are significant:

+ The use of e-invoices within CTC models is shown to reduce tax compliance costs by 37-39% for corporate businesses and by 8-56% for private businesses, compared to traditional paper invoicing. This efficiency gain encourages the adoption of e-invoice initiatives by multinational corporations.
+ The process's legal robustness is enhanced by mechanisms ensuring the authenticity of documents and preventing the repudiation of origin, thus reducing the risk of fraud.
+ Compared to legacy post-audit systems, real-time compliance verification significantly lowers the risk of penal fines that could be levied years after the transaction.
+ Automation replaces manual and periodic reporting, eliminating the need for VAT declarations and deductions and enabling automated collections and refunds. This transition also leads to a substantial reduction in paper-based documentation.
+ The implementation of these systems significantly narrows the VAT gap, setting the stage for potential reductions in future tax rates.
+ It promotes the establishment of unified messaging standards nationwide, minimizing heterogeneity.
+ Additionally, it simplifies or eliminates issues related to interoperability among service providers and accelerates widespread market adoption, significantly reducing transaction costs compared to fragmented, bottom-up market developments.
+ This regulatory environment fosters the emergence of innovative invoicing and trade finance mechanisms.

## 5.2    Impact of Third-Party Solution Offerings and related Technology Trends

Pursuing in-house development has become increasingly impractical for multiple reasons:

+ The feasibility of a favourable business case is diminished due to substantial initial and ongoing project costs.
+ The process is overly time-intensive.
+ There is no justification for creating solutions that are readily available and operational through numerous solution providers.

+ Regulatory mandates from many governments necessitate the use of accredited service providers for e-invoice transmission. Moreover, key trading partners may stipulate the use of specific service providers for electronic invoice and business message exchanges, rendering the use of a service provider obligatory.

Consequently, the viable alternatives are the acquisition of third-party applications or the adoption of external cloud services. The selection between services and applications/solutions entails:
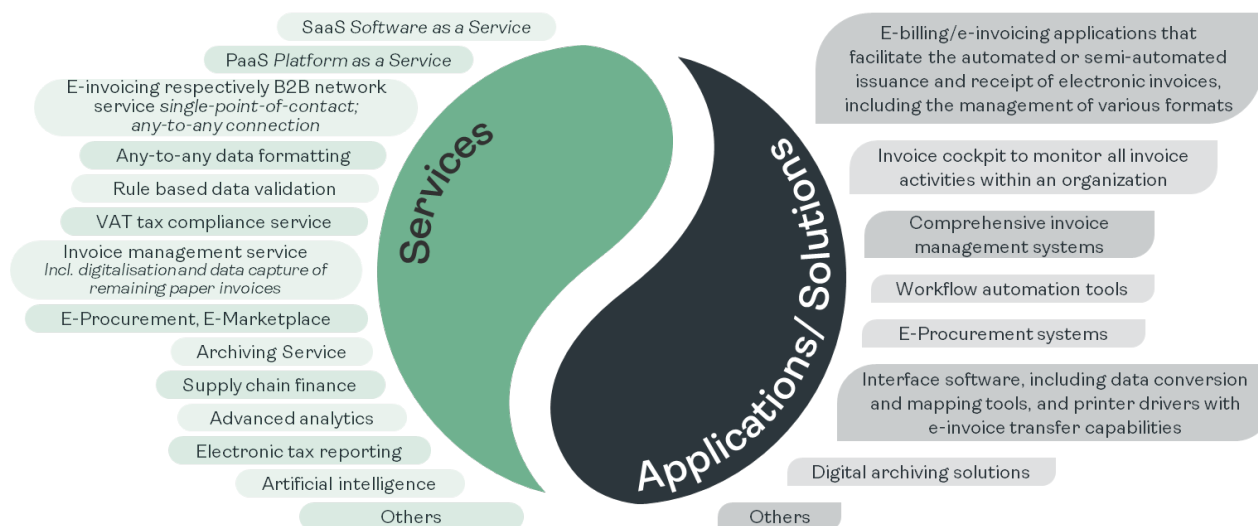


The decision-making process for selecting the appropriate scenario hinges on:

+ The organization's Make or Buy policy
+ The existing IT and processing environment
+ Invoice volume
+ The overarching business case
+ Internal operational requirements
+ The requirements and capabilities of business counterparts

Typically, larger organizations evaluate 2-3 scenarios, conduct comparative analyses, and finalize their decision. This decision-making process is followed by issuing a Request for Proposal (RFP) to 2-4 potential providers.

### 5.3    Comprehensive Strategy Encompassing Entire Scope of Objectives

### 5.3.1    Internal Objectives

The internal goals and requirements can be delineated and executed with a significant degree of autonomy. The following domains, among others, may serve as focal points for setting objectives:

+ **Integrated Digital Trade**: This extends well beyond simple automation of invoice processes to encompass all pertinent activities before and after source-to-pay and order-to-cash processes. Based on our experience, foundational elements often need to be established in a preliminary project, especially in terms of maintaining an accurate database for trading partners and products. Master data cleansing becomes a necessary step in many instances. Streamlined processes are crucial for adding new trading partners, and efforts should be made to eliminate or synchronize redundant data across different systems in real-time.

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+ **Enhancement of Working Capital**: Automation of invoices plays a critical role in this area. Electronic invoicing facilitates the reduction of exceptions, expedites processes, enables discount utilization, lowers days sales outstanding (DSO), enhances cash management transparency, reduces capital expenditure, and supports the use of Supply Chain Finance.

+ **Environmental, Social, and Governance (ESG)**: The shift towards electronic invoicing can be strategically employed to improve ESG reporting and performance.

+ **System and Process Harmonization**: Aim for a fully digital internal transition through suitable initiatives.

+ **Future-Ready and Agile Solutions and Process Design**: Adapt to existing and potential future legal mandates as well as real-time interactions with tax authorities and trading partners, which are essential for future solution frameworks. Characteristics such as platform openness, agility, interoperability, and the adoption of new technologies are vital. Despite the difference from the current and organically developed environment, these elements should not deter preparations for the future. It may be necessary to overhaul existing internal systems and processes to stay ahead.

When outlining the strategy, the following inquiries may emerge:

+ Do we aim to automate solely the invoicing process, or should we extend this to include purchasing, the complete procurement, and the sourcing process?
+ Is our goal to initiate with the order-to-cash or purchase-to-pay automation?
+ What strategies do we have to prevent or minimize the existence of parallel systems and processes in business process automation and tax reporting?
+ Which company divisions, systems, and processes will this project impact, and how can we transition from existing solutions?
+ How should B2B networks and other cloud services be integrated into our approach?

### 5.3.2   Improve Digital Collaboration with Trading Partners

Strategic considerations Influencing the business direction:

+ The necessity for compliance with the stringent mandates set forth by principal trading partners, which may include the adoption of designated electronic marketplaces or B2B service providers.
+ A rising demand among trading partners for the capability to facilitate the transmission of various business and trade communications.
+ Enhancements in global interoperability to enable a seamless and cross-platform exchange of diverse business messages.
+ The expansion of service provider operations internationally, with an increased scope of geographical coverage.
+ The dichotomy in the service provider landscape, where numerous providers are interconnected, enabling the cross-platform sharing of messages, contrasts with the presence of several B2B solution providers now operating in upwards of 110 countries. For enterprises, the ideal scenario entails a unified point of contact managing all trade cycle transactions, both inbound and outbound. While feasible for businesses operating within a limited geographical span, even globally active entities should aim to consolidate their solution providers to approximately five.

### 5.3.3   Ensure Tax Compliance

Given the diverse nature of regulations and frequently tight timelines for implementation, navigating this domain presents significant challenges.

Outlined below are essential questions that organizations must consider prior to formulating a strategy:

+ Are we operating in jurisdictions that currently or will shortly adopt a Continuous Transaction Controls (CTC) model for invoices, receipts, and other fiscal documents or tax reporting?
+ Are we engaged in commerce within countries that currently or will soon require a Business-to-Government (B2G) or Business-to-Business (B2B) electronic invoicing mandate?
+ What measures can be taken to guarantee tax compliance within a global framework?

### 5.4 Implementation, Migration and Onboarding

### 5.4.1 Scenario for Gradual Internal Implementation

Approximately 30% of larger organizations continue to manage their invoices in a decentralized manner, frequently employing multiple ERP and accounting systems. Such a setup restricts financial managers from achieving comprehensive visibility regarding the quantity, total value, and status of invoices.

Adopting electronic invoicing typically establishes a centralized gateway for both sending and receiving invoices, significantly enhancing the transparency available to finance managers. This centralization is a crucial step towards optimizing working capital.

In a dispersed and extensive operational landscape, the greatest benefits are realized by adhering to these specific procedural steps:



OPTIMISATION STEPS IN LARGE ORGANISATION
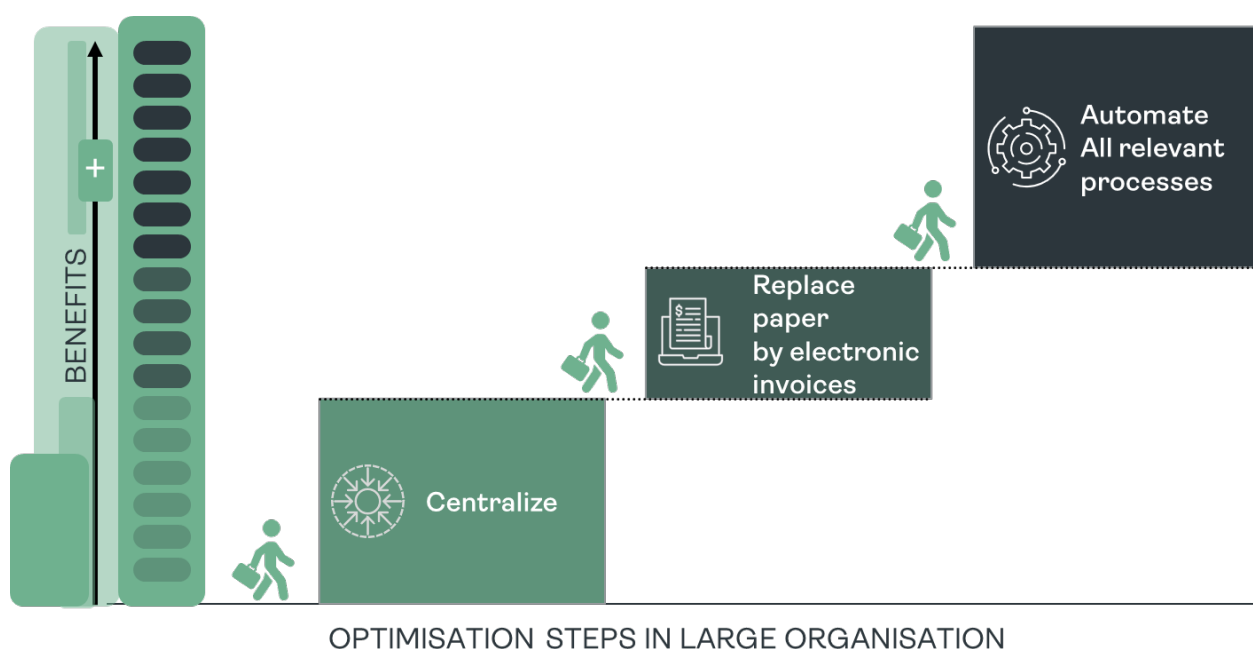
Given that achieving this objective may be time-intensive (for example, requiring up to two years), an effective alternative involves migrating within a decentralized framework. If the limitations associated with future centralization are anticipated, they can be incorporated into the system and process planning and execution phases.

### 5.4.2 Determine the Best Scope for your Organisation

In approximately 50% of nations, the implementation of electronic invoicing is optional, yet legally sanctioned. For the majority of organizations, transitioning to e-invoicing represents the initial step towards achieving an Integrated Digital Trade framework. This underpins the rationale behind many organizations prioritizing e-invoicing, often referred to as the 'Queen of

messages'. Typically, initiating the digital transition with the invoicing message and subsequently expanding the electronic quotient within the organizational framework is considered a strategic approach (left arrow of next chart).

+ **Transitioning to electronic and automated processes is generally beneficial. Nonetheless, within most organizations, it is recommended to conduct a thorough review and refinement of current processes before implementation. It is often possible to eliminate up to 30% of legacy inefficiencies without sacrificing functionality.**

Determine the appropriate migration path to exploit the full optimization potential:



E-invoicing, in isolation, presents a compelling business case, offering tangible benefits. Nonetheless, the potential for additional future cost savings is amplified through the realization of a fully automated trade cycle. A secondary group of users seeks to extend digitization and automation beyond mere invoicing to encompass a broader spectrum of trade-related communications, such as orders.

The strategic approach to e-invoicing varies across organizations, influenced by the dominant nature and optimization potential of different invoice streams. It is advised that projects be aligned with these areas of potential.

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Prioritizing Digital Transition of Invoice Streams:
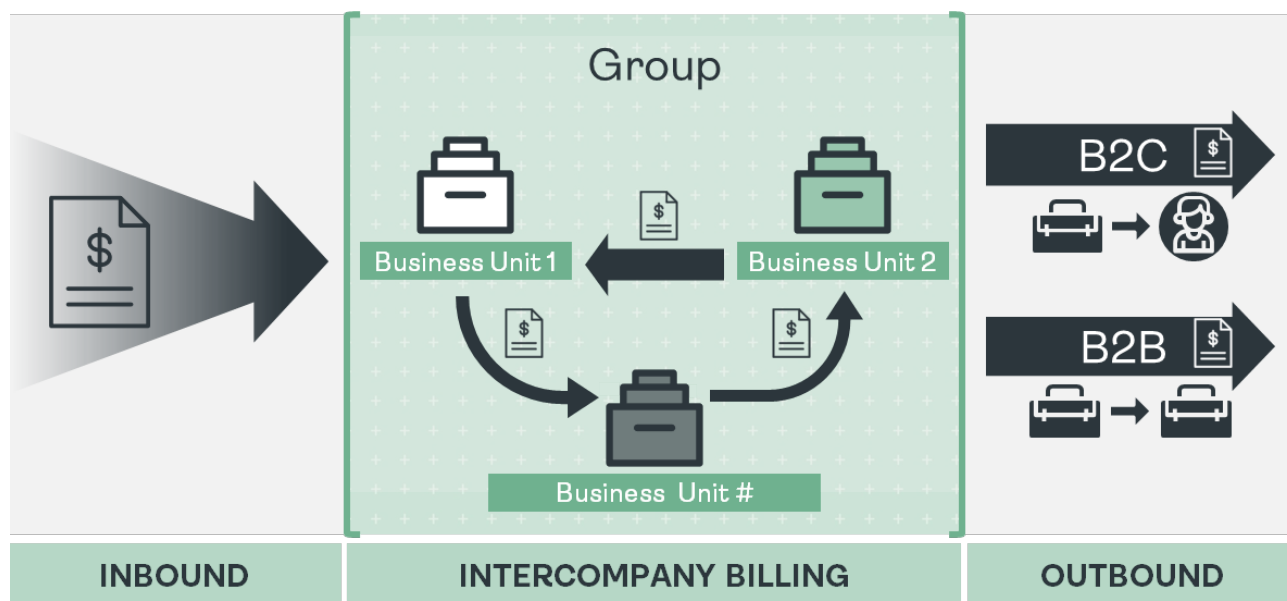


**Inbound Invoices**: Organizations with substantial purchasing power may prioritize the digital transition of inbound invoices to leverage their position and encourage suppliers towards electronic invoice submission.

**Intercompany Billing**: The potential for optimization within intercompany billing is often over-looked. This stream offers complete control to the organization and, in scenarios where all entities are within the same tax jurisdiction, invoices can be efficiently processed electronically or through account transfers. In instances of diverse tax jurisdictions, adopting a standardized approach to electronic invoices, mirroring external processes, ensures authenticity, integrity, and readability.

**Outbound Invoices**: Organizations with a high volume of consumer transactions (B2C) have begun issuing electronic invoices directly. Despite this, widespread adoption remains modest; achieving a 60% client utilization rate is deemed successful, with most organizations reaching only 45-60%, and the highest performers achieving 85-97%.

To enhance electronic participation, organizations should consider implementing an opt-out model and/or leveraging networks (e.g., online banks or other popular consumer portals) for distribution. The use of PDF invoices, transmitted via email or portals, has gained popularity, with some organizations advancing by adopting push methods over portal-based strategies. This approach is equally applicable to B2B invoices for smaller entities, where PDF invoices transcend mere paper replicas by incorporating structured (XML) data layers and enabling dynamic interaction functionalities (e.g., dispute resolution, payment options) within the documents. E-invoices are crafted to comply with VAT regulations, including digital signatures for crucial sections, verification processes, and, occasionally, provisions for long-term online archiving.

### 5.4.3 Stricter Internal Data Accuracy Mandated to Meet Tax Obligations

### 5.4.3.1 Compliance Challenges

In response to the utilization of both lawful and unlawful strategies for tax optimization by numerous corporations, there is a heightened focus on tax compliance. The Organization for Economic Cooperation and Development (OECD) along with the G20 nations have consented to bolster the requisites for both reporting and ensuring the tax compliance of corporate documentation. This necessitates companies to furnish more detailed proof affirming the genuine existence of their trading partners and that such corporate documents are indeed underpinned by tangible goods or services transactions. The current standards for the precision of

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invoices and associated business documents might no longer meet these enhanced requirements.

Enhancing the accuracy of invoicing can be achieved through the refinement of address information for both issuers and recipients, alongside all data pertinent to the transactions (goods and services).

One of the primary sources of Accounts Payable (AP) fraud includes the issues of phantom trading partners (non-existent corporate entities), undelivered supplies, and fraudulent invoicing.

Many of these obstacles can be surmounted by adopting measures aimed at the augmentation of data accuracy and the validation of this data in real-time or near-real-time. The deployment of artificial intelligence capabilities presents new avenues for the identification of fraudulent invoices. Employing electronic invoicing, predicated on precise data, establishes an excellent groundwork towards achieving these objectives.

### 5.4.3.2 Accurate Addresses and Master Data

Ensuring tax compliance necessitates the veracity of both trading entities and the accuracy of their addresses, aligning with their business register entries.

The deployment of electronic IDs and digital certificates offers a method for the technical authentication and unequivocal identification of trading parties. These tools are being utilized in certain jurisdictions to achieve this purpose. However, such identification mechanisms do not inherently assure the alignment of invoice issuer and recipient addresses. Instead, alignment can be achieved through the synchronization of master data with authorized registers, such as national business registers, which are commonly established for internal governmental use but may require modifications prior to the implementation of CTC systems. Furthermore, the creation and maintenance of public sector directories at various governmental levels are advocated, although access to these directories is often restricted to protect privacy. Legislation may be revised to facilitate online access to these directories. For operational efficiency, these registers should support various structural specifications, including those for headquarters, branches, and subsidiaries. Upon meeting these conditions, market participants can employ lookup routines to dynamically synchronize essential elements of their master data within their Enterprise Resource Planning (ERP) solutions or within the directories of e-invoicing network operators.

While direct data synchronization between trading entities' systems remains crucial in high-volume industries, it is anticipated that, in the medium term, this could be augmented or substituted by synchronization with national registries.

### 5.4.3.3 Accurate Product and Service Information

In accordance with compliance mandates, enterprises are required to substantiate that their business documents originate from legitimate transactions involving goods or services. This measure aims to deter tax optimization strategies such as over-invoicing, where the price of goods or services is artificially inflated, and under-invoicing, which involves reporting lower prices than actual, to evade proper tax liabilities.

Moreover, companies have a vested interest in ensuring that invoices accurately reflect the descriptions of goods or services provided. Particularly in the context of standardized or mass-produced goods and services within regulated sectors, it is feasible to align such information with a centralized database. An illustrative case is TARMED, which serves as a tariff framework within the Swiss healthcare sector, facilitating the verification of invoiced supplies against standardized data sets.

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Nevertheless, a majority of enterprises operate within frameworks that are not as rigorously standardized. For these entities, viable solutions exist to enhance the precision of invoice data. The adoption of integrated purchase-to-pay systems that support catalogue data matching exemplifies such an approach.

The Global Data Synchronization Network (GS1 GDSN) stands as a notable initiative enabling trading partners to uniformly share product information on a global scale.

In Mexico, the adoption of the United Nations Standard Products and Services Code (UN-SPSC) taxonomy by the 'Servicio de Administración Tributaria (SAT) for classifying goods and services has been instrumental in enabling the use of electronic invoicing since December 2017.

It is anticipated that data synchronization services will become increasingly pivotal in the fore-seeable future. Currently, however, the predominant preference among organizations is to place orders and receive invoices electronically. In many instances, the details contained in these electronic documents can be automatically aligned, simplifying the process.

### 5.4.4    Designing and Implementing Agile Systems and Processes for Enhanced Efficiency

The regulatory landscape and digital requisites for trade partners are evolving rapidly and with increasing frequency. To effectively navigate these changes within the constrained time-lines necessitated, it is imperative for systems and processes to exhibit a high degree of agil-ity. Presently, we are witnessing a significant wave of innovation in systems, highlighted by the proliferation of services facilitating cross-border electronic invoicing and tax compliance. Moreover, the emergence of solutions leveraging cutting-edge technologies are becoming more feasible and financially accessible.

This evolution presents lucrative opportunities for enterprises. Nonetheless, it is critical for these entities to strategically realign their internal mechanisms and workflows to fully capital-ize on the potential benefits, thereby advancing towards the complete automation of the Inte-grated Digital Trade.

Subsequent to optimizing the internal infrastructure, the enhancement of the electronic in-voicing proportion introduces an additional complexity.

### 5.4.5    Initiatives to Boost the Adoption of Electronic Invoicing

A growing number of nations and governmental entities are mandating B2G and B2B elec-tronic invoicing, inclusive of detailed requirements for structured exchange formats and fre-quently, the transmission channels. These mandates, necessitating comprehensive invoice content and incorporating tax reporting as an integral component, provide businesses with a solid foundation to automate their invoice processing.

Nevertheless, substantial regions across the globe remain where the implementation of ad-vanced mandates that benefit both tax authorities and businesses alike is not foreseeable in the near term.

In several jurisdictions, mandates are limited to the electronic submission of sales invoice summaries. While the structured electronic data from the supplier is adequate for tax report-ing purposes, it falls short in enabling buyers to automate their invoice processing workflows. In other regions, while electronic invoicing is legally acceptable, the decision to adopt e-invoic-ing and the choice of format rest with the trading partners.

The extent to which electronic invoicing can be adopted varies widely but can be significantly enhanced through strategic interventions. The success rate of adopting electronic invoicing is contingent upon the effectiveness of the onboarding methodologies employed.

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| Phase | Description |
|---|---|
| Classic approach | Primarily, large corporations serve as the pioneers in adopting electronic invoicing, exerting influence on their substantial trading counterparts to embrace the exchange of invoices digitally. The approach of Opt-In onboarding is utilized, wherein efforts are made to persuade each entity individually to join the electronic invoicing community. However, for the majority of organizations, achieving a significant portion of electronic invoices with large trading partners plateaus at approximately 25-30% even after several years.<br><br>Subsequently, these pioneering large enterprises endeavour to extend their push towards mid-sized and small trading partners to adopt electronic invoicing practices. Despite intensifying marketing efforts, a large organization alone cannot dictate market trends. Their influence is contingent upon the overall market's maturity. Consequently, the annual growth rates of electronic invoicing adoption remain constrained.<br><br>This pattern of market evolution has been prevalent historically and continues to unfold in numerous countries to this day. Nonetheless, it has not led to a widespread breakthrough in the markets thus far. |
| Pressing | For most major corporations, attaining a minimum electronic invoice penetration of 60% within three years is feasible. However, this target is not achievable through passive or merely amicable strategies with trading partners. Instead, proactive engagement and strategic marketing efforts are essential to elevate the adoption rate of e-invoicing. Additionally, it is imperative to refine standard contractual terms to furnish a legal framework that compels trading partners to transition towards e-invoicing.<br><br>While the adoption strategy predominantly relies on assertive tactics, it remains a legitimate approach provided that the initiating company or its service provider extends suitable e-invoicing solutions that accommodate the diverse needs and sizes of trading partners under equitable terms. The process for registration and use should be streamlined to the maxi- |

| | |
|---|---|
| | mum extent, aiming for minimal barriers to entry. For instance, initial engagement could be simplified to online registration, with each trading partner having a pre-assigned account that can be activated effortlessly with a single click, followed by the completion of their primary data.<br><br>An increasing number of prominent firms are adopting this strategic approach. |
| Powerplay | For the majority of large-scale enterprises, attaining a minimum of 80% electronic invoicing within three years is feasible. This is facilitated through the implementation of the 'Pressing' strategy, which incorporates penalties for parties that persist in utilizing paper invoices. Electronic invoicing is established as the standard mode of transaction, with penalties enforced for the issuance of paper invoices. The structure of these penalties is as follows:<br><br>+ Suppliers typically impose charges ranging from EUR 1 to EUR 3.50 on consumers and EUR 5 to EUR 25 on businesses for each paper invoice issued.<br>+ Buyers are inclined to deduct between EUR 15 and EUR 25 from the invoice value for each paper invoice received, particularly if the supplier is either unwilling or unable to facilitate electronic invoice transmission. |
| Closed electronic loop for orders and invoices | In numerous large organizations, a minimum of 40% of invoices are derived from Purchase Orders. These enterprises have the opportunity to transition receiving all PO-based invoices electronically within a few months.<br><br>Suppliers are eager to obtain purchase orders. Should the prospect arise for them to exclusively receive these orders through electronic means in the future, they are likely to swiftly embrace this new method of communication. Moreover, this approach also enables them to submit invoices electronically. Consequently, this paradigm fosters a rapid and mutually beneficial scenario for both suppliers and purchasers. |

Given the established facts, it is noteworthy that numerous organizations have yet to transition to more effective onboarding methodologies. The technique represents merely a fraction of the journey towards electronic invoicing. Far more critical to achieving success and a substantial digital adoption rate is the rollout strategy, specifically the onboarding of trading partners.

Different rollout models in use:

| | |
|---|---|
| **Opt-In** | An issuer or recipient enhances their electronic invoicing system. They notify their counterparts of this advancement, encouraging them to adopt electronic invoicing for sending and/or receiving invoices. Persuading each participant to transition to electronic invoicing requires robust arguments, incentives, and/or moderate pressure. While traditionally, a more congenial approach was employed to onboard companies, increasingly, the Opt-Out model is being favored where applicable. |
| **Opt-Out** | An issuer or recipient enhances their capabilities for processing electronic invoices and notifies their business partners of this new facility. They communicate that beyond a specified deadline, all invoice exchanges will be conducted electronically. Parties interested in maintaining traditional paper-based invoicing are required to formally request exclusion from this electronic process, potentially incurring a fee for opting to continue with paper invoices. |

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| | |
|---|---|
| | The adoption of the Opt-Out model significantly accelerates the transition to high-volume electronic invoicing. This approach is viable for any large organization, particularly those that engage in regular transactions with a consistent group of partners, such as leasing companies, the transport and logistics sector, telecommunications, utilities, providers of credit and customer cards, office supplies, maintenance, repair and operations (MRO) goods, consumer packaged goods, online services, and communities utilizing extranets or standardized client software.<br><br>Presently, many issuers employing this model opt for signed PDF invoices, with or without accompanying XML data. This ensures immediate legibility for the recipient, although the advantages may be somewhat limited in the case of PDFs alone. |

Success rate for an organisation and the electronic proportion one year after launch

| Model | Electronic proportion of all invoices |
|---|---|
| Issuer driven 'Opt-In' | 1-5%    with free market range<br>5-50%     within existing supplier-buyer networks |
| Issuer driven 'Opt-Out' | 85-90% |
| Recipient driven 'Opt-In' | 1-5%    for organisations without much purchasing power<br>50-70%   for organisations in strong purchasing position |
| Recipient driven 'Opt-Out' | Up to 90% for organisations in strong purchasing position and providing electronic orders |

Many businesses do not operate in conditions that are conducive to adopting an Opt-Out approach. Nonetheless, the model should be customized to suit the feasibility within each specific context. Undoubtedly, some of your peers will eventually implement this strategy, which will have a tangible effect on your circumstances.

## 5.5    Overcoming Potential Barriers: Strategies for Success

The barriers differ greatly for enterprises in various countries and depending on the company size. Some known obstacles and possible measures to overcome those barriers:

| Known obstacles | Possible actions to overcome barriers |
|---|---|
| Legal requirements are unknown or confusing | The multi-stakeholder forums and/or federal administrations have the privilege of proactively disseminating relevant information to the broader market. Some of these entities organize informational events and roadshows or engage evangelists to further their reach. Additionally, many operate information portals that house key information for public access. |
| Missing market transparency about the solutions offered and the collaboration among various service providers | Multi-stakeholder forums and federal administrations are afforded the opportunity to proactively disseminate relevant information to the broader market. Several of these entities have established comprehensive information portals. Leading providers tailor their offerings with segment-specific information, enabling small businesses, for instance, to choose options like 'I am a small biller' or 'I am a small invoice recipient.' This facilitates an interactive dialogue that precisely delivers the pertinent information in a streamlined manner. |

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| | |
|---|---|
| Change/adoption of internal organisation processes (40% of larger organisations) | It is inherent to human behaviour that established habits are resistant to change. This holds particularly true when a project impacts multiple departments, necessitating adaptations. Consequently, focused management oversight and decisive actions are essential. |
| Divergent requirements of trading partners regarding formats, methods and processes | In the context of bilateral (direct) exchange of structured electronic invoices, leveraging standards can alleviate the challenges involved. Additionally, operators of e-invoicing networks possess the capability to substantially decrease complexity for end-users. |
| Trading partner does not support the electronic invoice | From a statistical perspective, there is a considerable probability that your trading partner is already equipped to support electronic invoicing. This scenario may be attributed more to an information deficit rather than a lack of capability. Numerous federal administrations, multi-stakeholder forums, and provider associations have taken the initiative to maintain publicly accessible user directories.<br><br>In addition to enhancing transparency, trading partners frequently require motivation to adopt electronic invoicing promptly and guidance on its implementation. |
| Task sharing for accounting and invoice processing with external parties (trustee, tax consultant, commercial auditor, etc.); is in some countries practised by up to 50% of (smaller) enterprises. | These external parties exhibit apprehension or limited enthusiasm towards transitioning from labour-intensive (paper-based) processes to more efficient, electronic, and automated workflows. It may pose a significant challenge for multi-stakeholders to elucidate and demonstrate the risks associated with resisting the adoption of new electronic methodologies. |
| Lack of budget | Internal development initiatives often result in substantial initial and subsequent expenses. Conversely, applications and services that have been validated in the field from external providers tend to be considerably more cost-effective. Opting for on-demand services or Software as a Service (SaaS) models can lead to relatively moderate upfront investments. |
| Lack of understanding of current available solutions | Some market analysts enhance market transparency through their publications and events. Solution providers are urged to excel in market communications. |
| Lack of resources to manage automation | Elevate electronic invoicing to the enterprise's top priority. |
| Supplier resistance | Avoid enforcing a uniform approach and mandating a singular data format in alignment with your business process across all suppliers. Suppliers vary considerably in their capabilities and requirements. If those receiving invoices (or the electronic invoicing network operators involved) accommodate mul- |

| | tiple invoice formats, support any-to-any data conversion, and offer advantages (such as trade finance opportunities and early payment options), supplier acceptance is likely to markedly improve. |
|---|---|

## 5.6 Success Factors

In our globally innovative landscape, it's evident that the propensity for behavioural change among the majority hinges on external pressures. Consequently, merely extending an invitation to trade partners to adopt e-invoicing might not swiftly yield the anticipated success.

Given the unpredictable economic climate, which exacerbates cost pressures, it's likely that such conditions will serve as catalysts for modifications in invoice processing methods. It's advisable for organizations not to await coercion from customers or suppliers but to proactively embark on e-invoicing initiatives. This approach allows for the resolution of details without undue haste, facilitating a smooth transition from traditional paper invoicing to digital formats.

Historically, the immediate success of e-invoicing projects has been hampered by several factors:

+ Insufficient recognition of the project's impact across various processes and departments.
+ Inadequate project management.
+ An excessive focus on technical aspects rather than on critical challenges such as process automation and the integration of a significant number of suppliers or customers in a brief timeframe.

For e-invoicing initiatives to succeed, several critical factors must be considered:

+ Recognition by top management of e-invoicing's extensive potential, beyond mere savings on printing and postage or the manual entry of invoice data into ERP systems.
+ Support from management, given the cross-departmental nature of such projects.
+ Designation of a committed project lead.
+ Establishment of a three-year plan with phased implementation, starting with an initial phase that delivers immediate benefits (ideally, involving a single invoice stream within one division of a large organization).
+ Effective internal and external communication with all stakeholders involved.
+ Excellence in rollout strategy, aiming for a high adoption rate among suppliers/customers through preferable opt-out policies coupled with dynamic marketing efforts.
+ Realistic assessment of the organization's mid- to long-term technical capabilities in terms of workflow and archiving, making informed decisions on in-house development versus purchasing, and choosing between direct or networked solutions.
+ Avoidance of unnecessary development of solutions that are readily available at a fixed price and have been successfully tested in other organizations.
+ A practical understanding of the technical abilities of partners to send, receive, and archive electronic invoices, often significantly lower than anticipated. Simple, cost-effective interfaces and, if necessary, third-party archiving services are crucial.

## 5.7 Benefits and Business Case

For the past two decades, the momentum for the adoption of electronic invoicing has been predominantly driven by the private sector. Organizations have been transitioning to digital processes to leverage multiple benefits, including:

+ Enhancement of process innovation and automation
+ Increased operational efficiency and reduction in discrepancies and manual interventions

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+ Enhanced accuracy of master data and invoice content, ensuring alignment with orders and contracts
+ Improved compliance with tax regulations
+ Optimization of cash flow management
+ Enhanced business flexibility
+ Minimization of invoice fraud
+ Enhanced transparency and accountability
+ Environmental benefits
+ Meeting digital interaction demands from key trade partners
+ Cost reduction

The shift towards e-invoicing is, to a significant extent, an information technology (IT) initiative. This reality has compelled especially larger enterprises to conduct comprehensive business case analyses historically.

**+ These analyses have generally validated a fundamental principle: By adopting electronic and automated invoicing processes, businesses can achieve cost reductions of 60-80% compared to traditional paper-based systems, with a return on investment typically realized within 0.5 to 1.5 years.**

Contemporary surveys indicate that approximately 90% of major corporations in developed economies have adopted e-invoicing to some degree. Although in some cases the electronic exchange of invoices might represent a small fraction of their total invoicing, these companies likely still perceive a positive business case. Exceptions to satisfactory outcomes are relatively rare, with common issues including the continued operation of traditional paper-based systems alongside digital processes, attempts by companies to develop proprietary solutions rather than deploying proven third-party systems, and a reactive rather than strategic approach to e-invoicing implementation. These challenges often arise from the complex and varied IT, process, and compliance landscapes that develop over time.

It is projected that by 2030, up to 90% of organizations will be compelled to adopt e-invoicing, driven by legislative mandates or requirements from key business partners, making the necessity of a traditional business case less critical. Instead, the focus may shift towards evaluating the value proposition offered by various solution providers.

For those interested in a more detailed analysis of e-invoicing business cases, additional information is available at http://www.billentis.com/e-invoicing-businesscase.pdf.

## 5.8    Shifting Strategies: Moving from Reactive to Proactive

Certain government initiatives, such as the EU ViDA project, may experience delays in their implementation beyond the initially scheduled timelines. Nonetheless, this should not serve as a justification for postponing the acquisition of further details or specifications. Rather, it presents an opportunity to proactively prepare for various potential developments.

Employing a nimble internal solution or engaging with a versatile third-party service provider ensures sufficient adaptability to meet future requirements, irrespective of changes in legislation or the expectations of trade partners.

**+                    Now is the time to take the next step!**

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# 6. Service Providers in an Ambigious Market Environment

## 6.1 A Challenging Path to Reach the Promised Land

In light of the global implementation of e-invoicing mandates, this presents a significant opportunity for service providers. However, to capitalize on this opportunity, there is a necessity to increase current adoption rates from an average of 50% to up to 100% in countries where such mandates are in effect. This involves ensuring compliance with existing legislation, which often mandates the use of structured data formats for e-invoices, moving away from the predominantly used PDF formats. Consequently, we anticipate a substantial increase in e-invoice volumes, necessitating companies to establish new connections to ERP systems, transition to different data formats, and facilitate data exchanges with tax authority platforms.

Furthermore, service providers must undertake considerable investments in their current solutions to meet legal requirements, including integrating with emerging tax authority platforms and e-reporting mandates. This is particularly pertinent for providers aiming to operate across multiple jurisdictions, as they must navigate varying regulatory landscapes. Beyond legal compliance, service providers must also address technical challenges associated with adopting new technologies such as AI and managing significantly higher data volumes.

Another challenge is the growing competition within the e-invoicing market. Each new e-invoicing mandate sees approximately 50 new market entrants per country, a number that fluctuates with market size. This surge in providers is leading to a decrease in price levels, as newcomers often adopt low-price strategies, ultimately commoditizing e-invoicing services.

In summary, the initial phase may see a decrease in revenue and an increase in costs for service providers, before the benefits of higher volumes materialize.
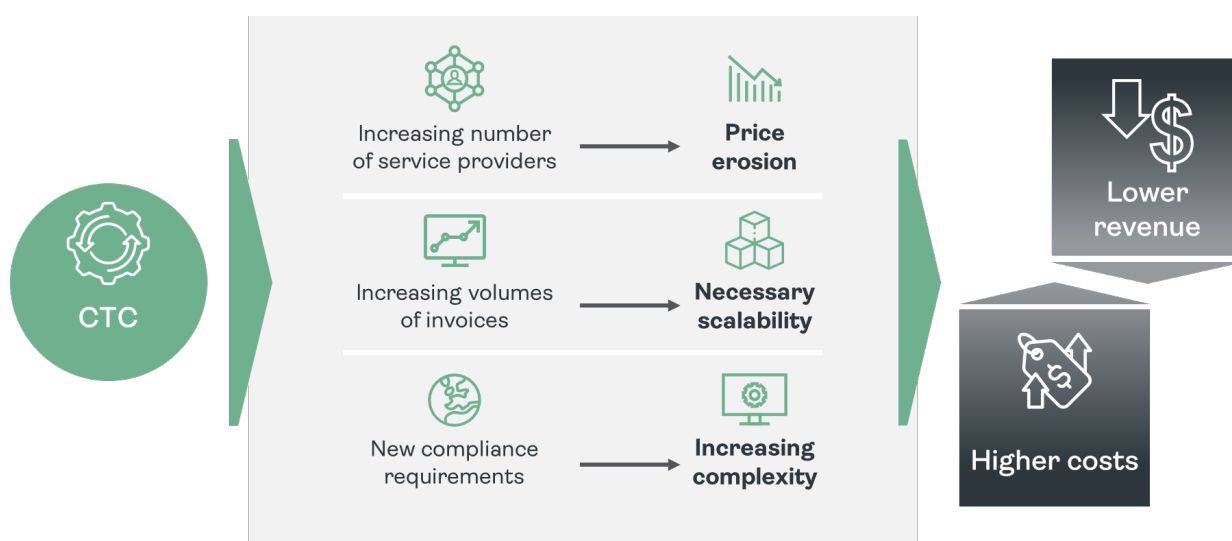


## 6.2 Navigating the Tornado: The Urgent Crusade for Innovative Service Providers amid Regulatory Upheavals

Even for larger enterprises, complying with swiftly evolving regulations via internal mechanisms often presents considerable challenges. As a result, it becomes crucial to engage third-party solutions and service providers to facilitate their navigation through these transitional periods.

Providers specializing in these solutions possess the requisite expertise and business acumen to manage such complexities. However, aiding clients through transitions remains a formidable task for them as well. The competitive landscape among these providers has intensified,

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making customer-centric innovations and services more vital than ever. As standard electronic invoicing services gradually become ubiquitous, differentiating through unique offerings and innovations will be essential. Consequently, devising a sustainable and cost-effective strategy for future business management emerges as a critical concern for these service providers.

In addition to core electronic invoicing services, we identify several opportunities for the integration of value-added services. These services can be selected individually, combined in various configurations, or fully integrated, depending on the specific needs and preferences of the target customer segments and geographical regions. The decision to incorporate these services, either through partnerships or by developing them internally, will be guided by their strategic alignment with the business objectives and the requisite time to market.

Future markets radar for service providers – future management
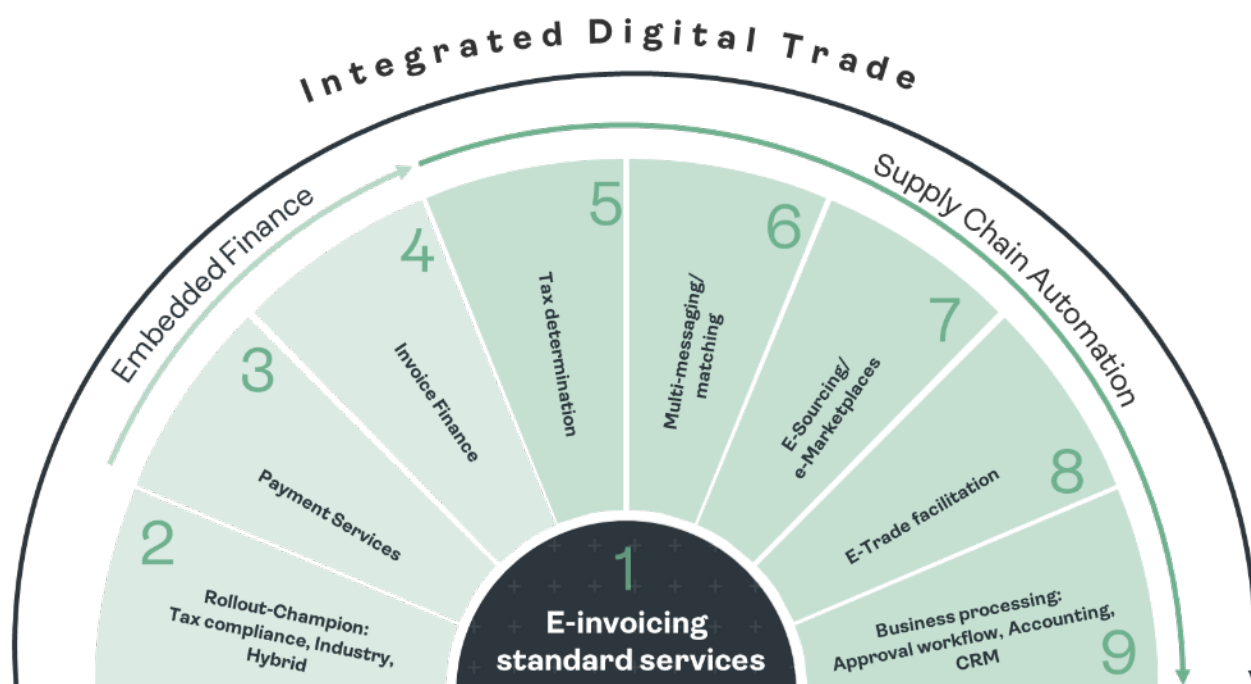


1. The **e-invoicing standard service** offering may encompass a comprehensive range of capabilities, including data formatting across various formats, preparation of e-invoices that comply with domestic tax regulations, as well as their transportation/distribution and archival. Achieving cost leadership is essential for maintaining competitiveness in the future market landscape. Providers that are unable to elevate their processed invoice volume beyond the average market growth rate should consider mergers with competitors as a strategy to attain the necessary critical mass.
2. Service providers may strategically select specialized domains to excel as leaders in deployment and become **roll-out champion**. One potential approach is to comprehensively address global tax compliance needs, an offering particularly appealing to major multinational corporations. Given the distinct compliance requirements across various sectors, including retail, telecommunications, automotive, and others, some providers may opt to focus on these specific industries on an international level. Additionally, in the interim where paper invoices remain in circulation, providers can supplement their offerings with hybrid services such as scanning and printing, thereby ensuring complete coverage for all incoming and outgoing invoices for businesses.
3. The connection between payment processes and electronic invoicing is evident. With the introduction of new e-invoicing mandates that incorporate payment information, this link is becoming increasingly significant. Both traditional banking institutions and

numerous financial technology companies (Fintechs) are now providing a variety of new **payment services**. The emphasis is on enabling suppliers to present their customers with diverse payment alternatives. These services will be integrated into embedded finance solutions, which are designed to benefit both small and medium-sized enterprise (SME) suppliers but also large corporations across sectors such as telecommunications, utilities, and insurance, serving a substantial base of business-to-consumer (B2C) customers.

4.  **Invoice Financing** represents another crucial component of embedded finance offerings. With the ascent of interest rates, the significance of this option is increasingly apparent. It provides suppliers with an accessible means to address immediate financial requirements through the financing of individual invoices. Overall, a variety of buyer-focused and supplier-focused solutions exist, enabling businesses to tackle the issue of delayed payments and enhance their working capital management.

5.  In response to evolving tax compliance mandates, **solutions specific to tax** are increasingly integrating with e-invoicing systems. Tax authorities are tightening the requirements for the electronic submission of tax documents. While the initial focus was mainly on general ledgers and VAT declarations, there is now an expanding requirement for taxpayers to submit electronic versions of audit files, invoices, credit notes, debit notes, and payment receipt data produced by fiscal printers at points of sale. Moreover, businesses are pursuing assistance to accurately assess the correct VAT or Sales tax applicable to both inbound and outbound invoices.

6.  Concentrating exclusively on the processing of electronic invoices is no longer adequate. Currently, over 50% of service providers also facilitate support for additional business communications or **multi-messaging**, such as orders, order confirmations, and statements. Initially, these documents are transmitted within an electronic envelope. Leading service providers go further by offering advanced services, including content validation and correlating information across various messages. The most sought-after services at present involve the alignment of orders, invoices, and delivery notes.

7.  In the initial phase of supply chain automation, traditional **electronic sourcing** solutions and online marketplaces are progressively expanding into the domain of electronic invoicing networks, and conversely, these networks are also extending into the realms of e-sourcing and electronic marketplaces.

8.  Exporters and importers handle numerous cross-border invoices, in addition to a significant volume of customs, trade, and **transportation documents**. These supplementary trade documents often contain information that significantly overlaps with that found in commercial and tax invoices. Tax authorities and auditors are intensifying their demands for documentation that verifies supplies and customs documentation. The initial electronic invoicing network operators are venturing into this domain to provide comprehensive electronic document services to their clientele, offering a full suite of services for exporters and importers.

9.  To achieve full **business automation**, it is essential to also focus on solutions that identify the commencement or conclusion of the e-invoicing process. Commonly, this involves integrating Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), billing, and accounting systems for dispatching invoices, as well as ERP, accounting, and approval workflow systems for invoice reception. Currently, service providers frequently address this need through strategic partnerships with these vendors. Conversely, these vendors are progressively incorporating e-invoicing solutions into their portfolios.

It is improbable that a significant number of solution providers will possess the capability to deliver such extensive functionality on a global scale within a feasible timeframe. Rather, it appears more likely that existing entities will use partnerships to consolidate services and applications from diverse sources, offering customers an integrated new service.

The architecture of future solutions may critically rely on existing and forthcoming legal mandates, in addition to facilitating real-time cooperation with tax authorities and among trade

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partners. The importance of platform openness, interoperability, and the endorsement of nascent technologies like AI and blockchain are key components.

Given the potential for e-invoicing services to become fully regulated over time, the competitive landscape for solution providers might intensify considerably. Distinguishing oneself from rivals offering basic e-invoicing services could prove challenging. Therefore, acquiring such a commodity service from third parties and concentrating on providing value-added services and features that meet consumer demands might be a prudent strategy.

### 6.3    The Expected Transformation of the Service Provider Landscape

As the market for electronic invoicing continues to grow, an increasing number of providers are entering the field. This expansion is anticipated to accelerate with each new e-invoicing mandate, estimating approximately 50 new providers for each obligation. Particularly in Europe, the implementation of VAT in the Digital Age (ViDA) is expected to see around 1,000 active providers in the e-invoicing space.

The influx of new providers primarily stems from industries whose business models are being replaced by e-invoicing and from adjacent sectors with a direct link to e-invoicing activities.
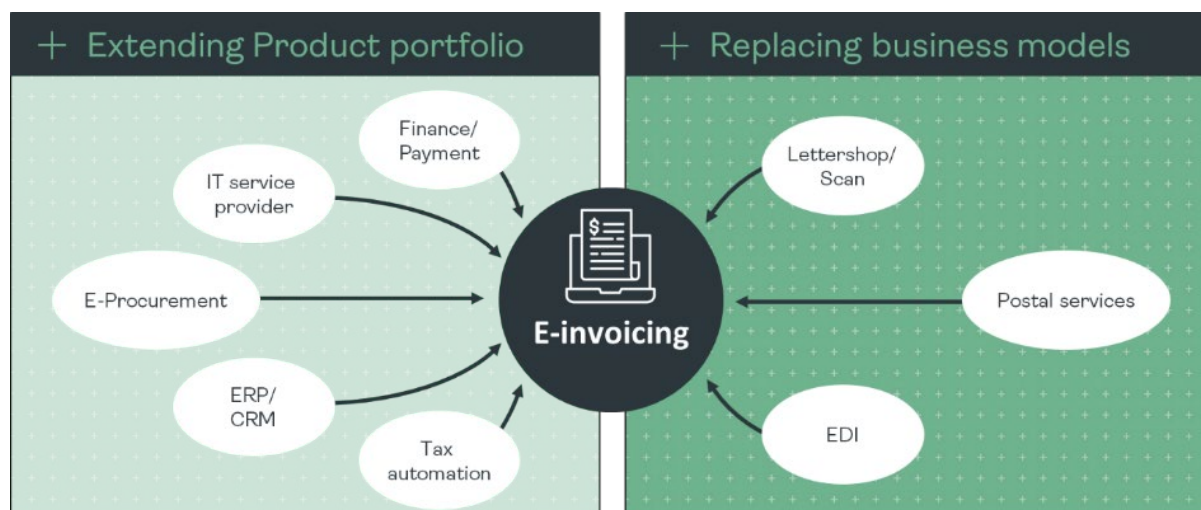


Notably, traditional postal services, lettershops, and scanning services are examples of sectors partially supplanted by e-invoicing. The shift towards mandatory electronic invoicing poses a significant challenge for these providers, potentially eroding a substantial portion of their current business. Consequently, there is heightened pressure within these sectors to engage in e-invoicing as a means to offset losses and adapt to the evolving landscape.

For traditional Electronic Data Interchange (EDI) providers, the transition may only partly apply, as they are likely to meet future e-reporting and e-invoicing requirements with minimal technical adjustments, primarily concerning data formats. However, they too must increasingly adopt four-corner models to remain competitive and relevant in the changing market.

Given that invoices are central to business processes between buyers and sellers, numerous sectors utilize or process invoice data, including payment and financing, procurement, tax automation, and Enterprise Resource Planning (ERP) system providers. For all these sectors, e-invoicing opens up new opportunities to enhance their existing services. Whether through streamlined processes, improved accuracy, or enhanced data analytics, the shift towards electronic invoicing not only signifies a change in how businesses manage transactions but also offers the potential for significant efficiency gains and innovation in business operations.

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In parallel with the increasing number of providers, the market is simultaneously undergoing consolidation. In the short term, growth will outpace consolidation. Therefore, it becomes crucial for providers to strategically position themselves within the market. This includes understanding the distinct roles providers play. The roles of Distributor, Technology Provider, and License/Risk Provider are identified as key.

| Customer facing | Distributor | Technology Provider | Licence/Risk Provider |
|---|---|---|---|
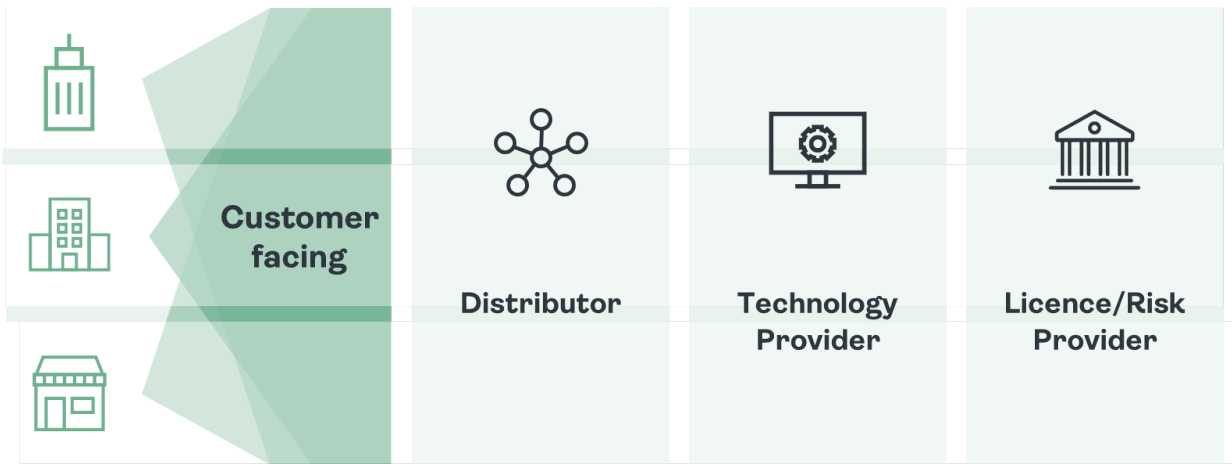
The Distributor collaborates with Technology Providers and, where applicable, License/Risk Providers to create a seamless user experience for customers. This combined offering is integrated into the existing functionality of the Distributor, who then facilitates access to the customer. Companies already serving large customer bases are primarily suited for this role.

Technology Providers configure and maintain the technology, typically made available to Distributors via API. This can involve individual components of the Integrated Digital Trade spectrum or already combined solutions. Specialists in areas such as Payment, e-Procurement, or e-invoicing, who lack access to larger customer groups or are hesitant to make such investments, find their place in this role.

Lastly, the License/Risk Provider, operating in regulated areas like Payment or Financing, provides the necessary licenses. This category also includes certified service providers specializing in licensed access to tax compliance platforms, offering their services to other providers.

At least in the short to medium term, these roles will be distinguished by different customer segments such as small, medium-sized, and large enterprises, necessitating tailored combinations of offerings depending on the segment.

**Ultimately, it is imperative for service providers to be aware of their desired market positioning and initiate the necessary steps to align with market requirements in a timely manner.**

## 6.4     Consolidation Ahead: Navigating the Evolving Landscape of E-invoicing and the Emerging Opportunities for Service Providers

As outlined, service providers in the e-invoicing sector are poised to encounter a range of challenges as the market evolves, including the commoditization of e-invoicing services and the necessity for substantial capital investments. Concurrently, a significant surge in the volume of transactions, including invoices and related documents, is anticipated.

Furthermore, the proportion of transactions processed through service providers, as opposed to direct buyer or supplier models, is expected to witness a marked increase. This shift

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is primarily attributed to the escalating complexity of tax compliance regulations across various jurisdictions, coupled with a dynamic marketplace characterized by rapidly changing requirements.

However, the primary driver for this transition is the growing adoption of four and five-corner models globally, significantly influenced in Europe by the ViDA initiative, which promotes these models across all EU member states. Even countries traditionally dominated by two-corner models, such as Germany and Austria, are transitioning towards a model that emphasizes the use of service providers. In Asia, the adoption of Peppol standards by tax authorities is fostering a similar shift, as Peppol inherently supports four and five-corner models. Similarly, the North American market is beginning to embrace these models, driven by initiatives from DBNA and collaborations with associations like OpenPeppol and GENA.

A defining feature of the four and five-corner models is their reliance on service provider networks, facilitating document exchange among all network participants. This characteristic positions the e-invoicing market as highly advantageous for early adopters, as a more extensive network user base significantly enhances the network's value for new participants, who are likely to find a majority of their business partners already on the network.

> **+** **Given the anticipated increase in transaction volumes, coupled with the need for higher investments and the benefits of being an early adopter, a significant consolidation of the e-invoicing service provider market is expected in the near term.**

From the current count of approximately 5,000 e-invoicing service providers worldwide, this number is projected to decline substantially over time. It is imperative for service providers to act swiftly to achieve a critical mass within their target market segments to remain competitive.

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## 7.    Featured Sponsors

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## 7.1    ABBYY

Headquarters:

ABBYY
Friedenstr. 22b, 81671 Munich, Germany

**ABBYY**

| | |
|---|---|
| Countries with highest invoice processing revenues | USA, Germany, France, Australia, Netherlands, UK, Poland, Canada, Belgium |
| Supported countries for e-invoice processing | Data extraction from e-invoice standards for: EU-wide with Peppol/Peppol BIS, DE, FR, IT, ES, NL, SE, AT. To come: DK, TR, GR, HU, NO, FI |
| Number of employees dedicated to e-invoicing and directly related offering | 800 |
| Registered users on own e-invoicing platform | IDP customers: Over 10.000 buyers, incl. many Fortune 500 companies. |
| Processed volume on own e-invoicing platform | 1.5 billion invoices per year (multiple channels, paper, email with PDF, and e-invoices) |
| *Core offering* | AI-powered Intelligent Document Processing (IDP) SaaS solution, offering a low-code/no-code approach for handling business documents. Over 100 pre-trained AI models accurately extract and validate data based on business rules. |
| Covered processes/messages along the supply chain | Accounts payable automation and hybrid invoice processing (electronic, PDF, paper). Pre-trained models process various supply chain / shipping document types: POs, delivery notes, packing lists, manifests, bills of lading, certificates of origin, etc. |
| Value-added services | Pre-trained AI extraction models with data normalization and validation rules. Ability to uptrain and optimize the models with continuous learning. |
| Main target market segments | Large suppliers in any industry<br>Balanced offering for suppliers and buyers in mid-sized organizations |
| Supported languages (with application/service and customer support) | Processes documents in 200+ languages. UI in EN, DE, FR, ES, IT, PT, KR, JP, CN (traditional/simplified). Customer support in English. |
| Competitive differentiator | Uses purpose-built AI to process a hybrid stream of incoming invoices from any source or region - paper, PDF and electronic. Extracted, normalized and validated data can be posted directly to the ERP system automatically or after manual verification. |

ABBYY AI readies you for e-invoicing

Regulatory mandates aiming to streamline VAT collection and enhance transaction transparency have gained traction globally, making e-invoicing essential.

However, e-invoices also pose challenges for businesses, especially those with global operations and cross-border trade.

Challenges include dealing with hybrid invoice streams (e-invoices, PDFs, paper), multitude of inconsistent international standards, regulatory compliance, and integration capabilities with existing systems. Nevertheless, if implemented with a thoughtful strategy and the right technology, e-invoicing can greatly enhance the efficiency, accuracy, and eco-friendliness of accounts payable (AP) automation processes across different sectors.

**Purpose-built AI streamlines invoice processing**

As a recognized leader in intelligent document processing (IDP) and pioneer of purpose-built AI, ABBYY helps global organizations successfully automate accounts payable processes and achieve faster and more accurate invoice processing, lower operational costs, higher compliance and security, and better cash flow management.

ABBYY's pre-built AI models for invoice processing enable businesses to handle any type of invoice, whether electronic, paper, or PDF, within one single platform. ABBYY IDP leverages artificial intelligence to extract, normalize, and validate data from invoices, and seamlessly integrate with existing ERP systems. Trusted by more than 10,000 customers globally, ABBYY generates real business value by streamlining business processes and transforming data into actionable insights.

**ABBYY IDP, powered by purpose-built AI manages all invoice formats with ease**

- **Any invoice type, any format one streamlined process:** Our pre-built AI models automatically detect and parse data from any invoice format, including XML, PDF, or a combination of both.

- **Data validation based on business rules:**
  ABBYY IDP not only extracts data from any invoice, incl. e-invoices but also validates it against your business rules. The model checks for required information, matches purchase orders with invoice line items, verifies vendors against a list of pre-approved ones, validates tax amounts, total amounts, quantities, and more. This reduces the need for human intervention and increases the rates of touchless invoice processing.

- **Human in the loop (HITL) verification:** If any exceptions are flagged by the model's data validation, they can be routed to a human operator who can view the invoice data in form of a convenient visual representation of the XML data source, and correct if needed.



- **Data export and archiving:** After the data is extracted and validated, it can be exported to your ERP system for further processing.
  ABBYY IDP also allows you to export and archive the electronic invoices in their original format.

ABBYY offers pre-trained AI extraction models for over 100 document types, including purchase orders, delivery notes, packing lists, contracts, IDs, tax forms and many more, providing a broad solution that can accelerate automation and promote efficiency across the entire organization.

Ready to transform your invoice processing with ABBYY intelligent document processing? Contact us today to integrate e-invoices in your accounts payable automation and adhere to imposed mandates.

Website: https://www.abbyy.com/solutions/electronic-invoices/

Contact: Andreas Gehrmann, andreas.gehrmann@abbyy.com

## 7.2    AVALARA

Headquarters: Seattle, USA

Avalara Inc.
Avalara, 255 S King St #1200, Seattle, WA
98104 Seattle, United States

| | |
|---|---|
| Countries with highest e-invoicing revenues | European & Asia-Pacific countries |
| Tax compliant e-invoice processing guaranteed for | European & Asia-Pacific countries, with a focus on Italy, Poland, Germany, Romania, France, Japan, Malaysia, Israel, and several LATAM countries. |
| Number of employees dedicated to e-invoicing and directly related offering | 500+ |
| Registered users on own e-invoicing platform | 41,000+ clients using Avalara software and services |
| Processed volume on own e-invoicing platform | Volume dependent on country |
| Core offering | Avalara offers SaaS solutions and services for global e-invoicing and end-to-end tax compliance automation (international e-invoicing, including clearance and live reporting as well as registrations for indirect tax with local authorities in many countries, goods classification, tax calculation, and tax returns). |
| Covered processes/messages along the supply chain | |
| Value-added services | Peppol access point in Europe, Japan, Australia, New Zealand, member of DBNAlliance in US, easy integration with pre-built connectors, 24/7 global support, local language support and onboarding services. |
| Main target market segments | Finance and tax departments in multinational companies striving for efficiency and tax compliance. Providers aiming to enhance their products. |
| Supported languages (with application/service and customer support) | English user interface and local language support. |
| Competitive differentiator | A global, universal and flexible solution for deployment of e-invoicing in a large number of countries, enabling seamless international expansion at any time. With additional tax compliance offerings and services, Avalara can help customers enhance their efficiency and achieve worry-free compliance on a global scale. |

## Avalara: Tax expertise meets e-invoicing

With growing trends to digital transformation worldwide that is rooted in fragmented local compliance legislation, global companies striving for compliant e-invoicing and tax reporting processes face many obstacles.

As a market leader in e-invoicing and tax automation software, Avalara delivers automated, cloud-based solutions for today's (and future) tax and e-invoicing challenges.

## Avalara E-Invoicing and Live Reporting

Avalara E-Invoicing and Live Reporting is a global solution that enables international companies to streamline their e-invoicing and live reporting compliance, automate processes in their finance departments, and increase efficiency.

Integrated into the ERP, accounting applications, e-commerce platforms, or other systems via a single API, this cloud-based service provides companies with the ability to exchange e-invoices through the international Peppol network, local-country networks such as the DBNA in the US, and tax authorities' platforms in multiple countries (as in Italy, Romania, Poland and other countries), and report required data to tax authorities in real time.

## Global reach for local compliance

Avalara E-Invoicing and Live Reporting allows multinational companies to deploy e-invoicing and live reporting processes in multiple countries at once – with only one project. The solution offers:

- Invoice data conversion and transmission in compliance with local requirements
- Global API for seamless integration and pre-built connectors for faster implementation
- Support for encryption, digital storage, digital signature, QR codes and other requirements
- PDF creation to allow human readability
- Regular adjustments and extension of supported countries for futureproof compliance
- Convenient interface with monitoring tools

## More than only e-invoicing

The Avalara E-invoicing and Live Reporting solution is designed to adapt to evolving compliance requirements in an ever-growing number of countries to support today's as well as future e-invoicing and live tax reporting needs.

In combination with the Avalara Tax Compliance platform, Avalara E-Invoicing and Live Reporting can provide businesses with a unique capability to establish compliant billing processes end to end: from generating invoices with local tax rates, transmitting them as e-invoices, all the way up to digitally reporting data to tax administrations in the required formats and timelines.



## Ease of use and interoperability

We are passionate about our customers and aim to offer integrated and interoperable solutions that are easy to use, grow with our customers' needs, and support their success.

## E-invoicing and tax proficiency for your compliance and efficiency

Avalara is a leading provider of cloud-based tax compliance automation and e-invoicing for businesses of all sizes. The combination of secure, scalable, and easy-to-use technology, and e-invoicing and indirect tax expertise, means Avalara can help companies around the world on their way to compliance and efficiency.

Businesses around the world, including Fortune 500 enterprises, and providers of e-commerce, ERP, and other business systems, rely on e-invoicing and tax expertise from Avalara.

Website: www.avalara.com/e-invoicing  Phone: U.S +1 877 224 3650; UK +44 1273 022400

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Sponsor

## 7.3    Axway Software, Inc.

Headquarters:

France:
Tour W, 102 Terrasse Boieldieu
92085 - Paris La Défense Cedex

Germany:
Axway GmbH, Kurfürstendamm 119,
10711 Berlin

US:
16220 N Scottsdale Rd Ste 500
Scottsdale, AZ 85254

| | |
|---|---|
| Countries with highest e-invoicing revenues | Countries across Europe |
| Tax compliant e-invoice processing guaranteed for | Countries across Europe |
| Number of employees dedicated to e-invoicing and directly related offering | 200+ |
| Processed volume on own e-invoicing platform | Up to 10 billion e-invoices per year |
| Core offering | Axway eInvoicing |
| Covered processes/messages along the supply chain | Archiving, CTC, GENA, DNBA, PEPPOL |
| Value-added services | B2B/EDI integration, Managed File Transfer, API Management |
| Main target market segments | Large and XL enterprises across all major industries |
| Supported languages (with application/service and customer support) | English, French, German |
| Competitive differentiator | Axway offers a mature, managed cloud solution for e-invoicing that allows compliance as well as protection for your B2B investments. One provider with a single point of management for all solution needs. |

## TAKE CONTROL OF E-INVOICING FOR AGILITY AND COMPLIANCE

Axway offers a modular and flexible solution that allows compliance as well as protection for your B2B investments. We provide comfort with a managed solution. And we can execute with a broad network of integrators and partners.
Furthermore, Axway is driving the standards: we anticipate what's coming, guaranteeing correct strategy and lasting solutions.

Axway eInvoicing tackles compliance on a corporate level, maximizing re-use and durability while helping you meet the deadlines. We combine compliance with automation, so our customers
realize the maximum benefit from digital opportunities.

**Stay compliant with evolving standards and mandates**

Axway not only promotes standards, but actively participates in architecting the standards. Axway eInvoicing combines standards-based invoicing (like PEPPOL using the standard 4 corner model) and bespoke national CTC platforms, and is prepared for upcoming ViDa (cross border) requirements.

> **B2G e-invoicing is already mandatory** for public procurement in the EU. Now, **B2B e-invoicing is emerging** in Europe. This irreversible trend brings **new challenges and opportunities** for businesses.
>
> **Axway** lets you handle invoicing in a **global**, **standards-driven**, and always **up-to-date** manner, whatever the country.

Axway eInvoicing helps companies become more efficient. Many companies need to manage multiple buyer-specific processes and portals. The resulting sprawl may be time-consuming, costly, and a nightmare to keep under control. In addition, e-invoicing helps companies reduce the cost of manual and paper-based processes.

With Axway eInvoicing, you can take a global approach to managing national e-invoicing specifics, eliminating vendor sprawl. Use it as a standalone solution, or fully leverage the consistent platform experience of the Axway B2B Integration Platform to consolidate EDI, API, and e-invoicing processes.

Contact Axway for a mature, standards-based, managed e-invoicing solution that keeps you in compliance and protects your B2B investments.

Website: axway.com/en/products/b2b-integration/einvoice
Contact: axway.com/contact-us

## 7.4　Basware

Headquarters:

Basware
Linnoitustie 2, PO Box 97
02600 Espoo, Finland

**basware**
Now it all just happens™

| | |
|---|---|
| Countries with highest e-invoicing revenues | US, Germany, France, Finland, Sweden, Netherlands, United Kingdom, Australia, Norway, Denmark, Belgium, Switzerland, Italy, Spain |
| Tax compliant e-invoice processing guaranteed for | 100+ countries globally in LATAM, APAC, EMEA & NA |
| Number of employees dedicated to e-invoicing & directly related offering | 1344 |
| Registered users on own e-invoicing platform | Suppliers:　2,2 M<br>Buyers:　17 610 |
| Processed volume on own e-invoicing platform | 220 million e-invoices per year |
| Core offering | Compliant Invoice Automation: Networked AP & AR with e-invoicing, archiving, spend & audit controls, risk management & fraud protection. |
| Covered processes/messages along the supply chain | Invoice audit trail: Supplier onboarding & creation of invoice, Authenticity of Origin, Integrity of Data, Legibility, Completeness & Accuracy of Content, Tax Determination, Tax Coding, VAT Assessment, VAT Reporting, Intrastat Reporting, VAT Reclaim, Compliant e-Archiving, Payment |
| Value-added services | Hybrid Services for 100% coverage (electronic & paper processing) for AP & AR, Compliant e-Archiving, spend & audit controls, risk management & fraud protection, SmartCoding, Invoice Enrichment, statement reconciliation, Procurement, Marketplace, Supplier Management, Strategic Sourcing, electronic order exchange, country compliance mandates, e-reporting, Analytics & Insights, AP audit & recovery services, digital signatures, invoice image visualization service, business data validation & enrichment service. |
| Main target market segments | CFO's office at large & mid-market companies working globally in any industry; Shared Service Centers |
| Supported languages (with application) | Arabic, Bulgarian, Chinese, Croatian, Czech, Danish, Dutch, English, Estonian, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Latvian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Serbian, Slovak, Slovene, Spanish, Swedish, Thai, Turkish, Ukrainian, Vietnamese |
| Competitive differentiator | 40 year global market leader in fully compliant end-to-end invoice automation with specific expertise in monitoring & managing complex local compliance requirements on behalf of our customers, delivering a compliant platform as a service. |

## IS E-INVOICING A SURE-FIRE SUCCESS?

Implementing Basware is a partnership. In today's fast-paced digital landscape, e-invoicing has become imperative for businesses aiming to stay competitive & efficient. Implementing a robust e-invoicing platform with Basware goes beyond streamlining financial operations; it signifies a strategic move towards operational excellence & regulatory compliance. By partnering with Basware, companies not only roll out their e-invoicing solution seamlessly but also gain access to elite AP automation capabilities. This strategic partnership not only reduces costs & enhances efficiency but also positions businesses as strategically advantaged players in their industries, ready to navigate the complexities of modern digital commerce with confidence.

### The benefits of e-invoicing & why shortcuts don't help

*Efficiency & cost reduction* - E-invoicing eliminates the need for paper invoices, PDFs & manual data entry. It means significant time savings, reducing administrative costs & minimizing the risk of errors. Automating invoicing processes also speeds up payment cycles & allows companies to manage their cash flow more effectively.

*Improved accuracy* - Manual data entry is error prone & can lead to billing discrepancies, payment delays & strained supplier relationships. E-invoicing reduces the likelihood of errors by automating data capture & validation. Increased accuracy promotes trust between trading partners, leading to smoother transactions & stronger business relationships.

*Improved tracking & reporting* - E-invoicing systems offer robust tracking & reporting functions (if they are designed correctly & purposefully). Businesses can easily access invoice histories, payment statuses & transaction details, enabling better financial analysis & decision making. These insights enable identification of areas for cost optimization & strategic planning.

*Environmental sustainability* - The environmental benefits of e-invoicing are undeniable. By reducing paper usage & reducing transportation-related emissions associated with physical mail, companies can significantly reduce their carbon footprint. Adopting environmentally friendly practices is in line with corporate social responsibility (CSR) initiatives & can improve a company's reputation.

*Global reach* - Electronic invoicing transcends geographical boundaries & enables companies to trade seamlessly. It supports multiple currencies & languages, making it easier for businesses to manage the complexities of cross-border transactions. This global accessibility opens up new market opportunities & expands the reach of companies.

### Keeping compliant with global laws & regulations

While the benefits of e-invoicing are clear, it is critical for businesses to carefully navigate the regulatory landscape. Compliance with laws & regulations is not optional, but mandatory.

*Legal requirements:* Many countries have introduced specific regulations for electronic invoicing. These laws describe the technical requirements, data retention policies & validation procedures that companies must adhere to when using electronic invoicing systems. Failure to comply can result in penalties, legal issues & reputational damage.

*Tax compliance:* Tax authorities worldwide are increasingly using e-invoicing to improve tax collection & reduce fraud. Compliance with tax laws, including value added tax (VAT) & goods & services tax (GST) regulations, is essential to avoid audits, fines & legal consequences. E-invoicing helps businesses maintain accurate tax records.

E-invoicing is a game-changer for businesses seeking efficiency, cost reduction & improved accuracy in their financial operations. Its benefits extend to environmental sustainability, global reach & enhanced reporting capabilities. However, amidst these advantages, the importance of adhering to laws & regulations cannot be overstated. Non-compliance can lead to significant penalties & legal ramifications. Therefore, businesses must prioritize compliance and find a great strategic partnership to harness the full potential of e-invoicing while avoiding unnecessary risks and being glocally compliant.

Website: www.basware.com
Contact: Anu Hämäläinen, +358400611706, anu.hamalainen@basware.com

**7.5    Billit**

Headquarters:

Billit
Oktrooiplein 1 bus 302
9000 Gent - Belgium

| | |
|---|---|
| Countries with highest e-invoicing revenues | Belgium, Luxemburg, The Netherlands, Germany |
| Tax compliant e-invoice processing guaranteed for | Belgium, The Netherlands, Italy, Bulgaria, Denmark, Germany, Finland, France, Greece, Hungary (OSA), Croatia, Liechtenstein, Luxemburg, Norway, Poland (KSeF), Romania (ANAF), Sweden, Australia, New-Zealand, Mexico, Lituania, Austria, Estonia, Malaysa (+ more countries added each month) |
| Number of employees dedicated to e-invoicing and directly related offering | 35 |
| Registered users on own e-invoicing platform | +70k users |
| Processed volume on own e-invoicing platform | 3M/month |
| Core offering | - Complete e-invoicing Saas-solution for professionals and SME's<br>- e-Invoicing service provider for SME's, enterprises and government services.<br>- e-Invoicing service provider for software providers |
| Covered processes/messages along the supply chain | Invoicing, customer and supplier management, automatic processing (PSD2), payment solutions and tax reporting |
| Value-added services | OCR, payment solutions, hybrid services, integrations, API accounting software integrations, pre-accounting tools, multilingual platform, multilingual support |
| Main target market segments | Professionals, SME, Enterprise, government services, software providers |
| Supported languages (with application/service and customer support) | English, Dutch, French, German |
| Competitive differentiator | e-Invoicing pioneer, provides world-wide e-invoicing access point solutions for any type of business |

**Billit – e-Invoicing solutions for any type of business**

**Billit** is a Belgian pioneer in e-invoicing and Peppol solutions, offering software solutions for businesses of all sizes, government agencies, and software providers.

In addition to connecting to the Peppol network, Billit's e-invoicing access point also serves as an access point to SDI (Italy), OSA (Hungary), ANAF (Romania), and KSeF (Poland).

**SaaS Software for Professionals and SMEs**
The cloud-based SaaS platform provides a comprehensive invoicing solution for freelancers and small to medium-sized enterprises (SMEs). With Billit, you can manage your company's entire invoicing process from the cloud. The integration with banks enables entrepreneurs to automate most of the invoicing process, and the platform seamlessly communicates with nearly all types of accounting software. The platform offers several other solutions that simplify business operations connected to invoicing such as time tracking, cash book and dozens of integrations streamlining the entire invoicing process.

**E-invoicing Access Point for SMEs and Enterprises**
Billit's e-invoicing access point is also available for SMEs and larger enterprises that have their own invoicing software, ERP systems, or billing engines. Billit offers different types of integrations depending on the situation (API, webhooks, SFTP, etc.).

**E-invoicing Access Point for Software Providers**
Billit's e-invoicing access point is also available for software providers that do not have direct access to e-invoicing networks and other institutions that want to provide e-invoicing access for their customers.

**Focus on Trust and Compliance**
As a pioneer in e-invoicing, Billit focuses on trust and compliance. Billit is ISO 27001 certified and actively participates in multiple development and communication programs for UBL, Peppol, and e-invoicing.

Website: www.billit.eu/en-int/
Contact: support@billit.eu

**7.6    bizBox**

Headquarters:

ZZI d.o.o.
Pot k sejmišču 33
1231 Ljubljana - Črnuče
Slovenia

| | |
|---|---|
| Countries with highest e-invoicing revenues | Slovenia, Croatia, Serbia, Montenegro, Bosnia, Austria, Romania, Italy. |
| Tax compliant e-invoice processing guaranteed for | Slovenia, Croatia, Serbia, Italy, Romania,… |
| Number of employees dedicated to e-invoicing and directly related offering | 25 |
| Registered users on own e-invoicing platform | Suppliers:    >15.000<br>Buyers:    >25.000 |
| Processed volume on own e-invoicing platform | > 18 million eInvoices per year |
| Core offering | E-Invoicing Network Service (SME, Government,), electronic data interchange network (EDI), SaaS (eInvoices, Registers, Logistic and customs procedures), regional Customer support centre, Mapping management, Standard conversion, main ERP solution API-s, Integral partner management, other massage types (Purchase, logistics, product data, customs),… |
| Covered processes/messages along the supply chain | Full Supply Chain (order to pay + delivery) and electronic reporting to authorities (customs, tax administration etc.) |
| Value-added services | Hybrid Services (electronic to paper processing), Certified eArchive, Cross standard conversions, master data management, onboarding, Supply Chain, and logistics B2B, … |
| Main target market segments | Small, medium, and large companies and organisations (B2B, B2C and B2G) – different industries (retail, utilities, government, services, production…) |
| Supported languages (with application/service and customer support) | English, Slovene, Croatian, Serbian |
| Competitive differentiator | Multi-tenant, micro services platform with a many-to-many architecture, easy integration in customer systems, extensive format library, vast amount of value added services, PEPPOL access point, EU Compliance |

# bizBox

**ZZI and bizBox eInvoices services**
ZZI develops and markets bizBox platform, a cloud-based network and SaaS platform for formal business documents exchange within the eInvoicing, business and tax reporting, Logistic, Customs Clearance processes. bizBox platform is open and ERP independent cross industry service that support the companies of all sizes. bizBox value-added services are already integrated in more than 65 ERP solutions (SAP, Infor, Microsoft...) and enable our customers to achieve higher level of automation, reduce manual work and obtain a 100% digital business document flow.

Small issuers can opt for a bizBox online solution - portal, which allows them to simply import the prepared eInvoice, sign it, and send it through the bizBox EDI.

**Reach - Distribution channels**
ZZI has roaming agreements with many other networks in west Balkan and central Europe region, including Banking networks, global EDI networks and PEPPOL, printing providers,... This allows our customer to communicate with companies using other service providers via the integration or by choosing a dedicated portal solution.
Open bizBox platform unable our customers, easily and by themselves connect any business partners to their network.

**Multi Format**
The platform based on cutting-edge technology also enables the users to convert data to/from various formats.
The supplier only sends one format and bizBox Online automatically interprets and converts it to the correct buyer formats. The buyer only receives one format. Currently, bizBox has a library with many different formats (XML/ EDIFACT/ EANCOM/ UBL/ CEN/ SWIFT/ PDF ...).

Taking an example of a manufacturer issuing structured invoices in XML format the platform may convert it to formats depending on the receivers' requirements. The digital documents can also be automatically printed as a service and delivered by ordinary post service without manual work for issuer.
All information and activities in bizBox create formal origin trails and originals are stored and delivered for formal EU eDelivery recognition.

**eArchive** – all bizBox users benefit from credible/certified archive of eInvoices and accompanying documentation. To ensure credibility, eInvoices are stored according to the law in an electronic form.

**einvoicing compliance**
eInvoicing compliance/national verification is necessary for companies to be able to handle all formal processes (taxes...) and Omni channel communication with customers and partners globally.
The bizBox network ensures all the prerequisites for operating with eInvoices in the EU single market according to the new legislation.
•        Support for EU recommended standards for cross-border eBusiness with eInvoices (UBL, CEN, e-SLOG 2.0, EDIFACT, etc.)
•        Support for credible eExchange according to the EU eDelivery standard (AS2 and AS4)
•        Automated mapping and conversion

**bizBox eInvoicing features:**
•        Compliance with international standards and legislation
•        Multilingual and multicurrency
•        Full AR & AP invoicing support
•        Various distribution channels (e.g. e-mail, portal, integration)
•        Worldwide partners onboarding
•        Electronic archiving

Website: www.zzi.si/ www.bizBox.eu/
Contact: Peter Zorko, peter.zorko@zzi.si, +386 1 530 33 00

## 7.7    cisbox

Headquarters:

cisbox GmbH
Brühler Straße 58
42657 Solingen, Germany

| | |
|---|---|
| Countries with highest e-invoicing revenues | D-A-CH (Germany, Austria, Switzerland); Europe |
| Tax compliant e-invoice processing guaranteed for | Solutions in place in 20+ countries across Europe and Middle East; GoBD software; ISAE 3402 Type 2 and ISO 9001 certification |
| Number of employees dedicated to e-invoicing and directly related offering | 150+ employees |
| Registered users on own e-invoicing platform | Companies:   4.000+<br>Users:          20.000+<br>Suppliers:    150.000+ |
| Processed volume on own e-invoicing platform | 5 Mio.+ e-invoices and transactions per year |
| Core offering | Cloud-based and AI supported BPaaS Procure-to-Pay Suite (includes accounts payable automation; e-procurement; data analysis); Peppol Certified Service Provider; EN 16931 invoice processing; middleware data converter (reception, preparation, export); process automation; web application development) supplemented by apps (Android, iOS) |
| Covered processes/messages along the supply chain | E-procurement: supplier activation; catalogue/OCI handling; ordering; goods receiving; inventory<br>Accounts payable: AI supported document and invoice data processing of up to 100% of incoming invoices (paper and image based, structured and unstructured electronic PDF; machine-readable electronic formats XML, EDI, ZUGFeRD, E-Fatura); accounts payable workflow and automation; e-banking<br>Data analysis: Business intelligence module for real-time data analysis, enhanced with data from various cisbox sources (e-procurement, accounts payable) |
| Value-added services | Direct and indirect sales channels; vertical business model for sender and receiver support; suitable for integration into the portfolio of strategic partnerships; referral partner programs |
| Main target market segments | Hospitality, healthcare, public sector, tax consultancies, services |
| Supported languages | German, English (UK / US), French, Spanish |
| Competitive differentiator | GoBD and GDPR compliant full-service-provider with 100% inhouse processing and development and wholly owned extended workbench 24-hours service level through 2 timezones |

**cisbox: redefining digital.**

### One-Stop-Shop made by cisbox.

We, cisbox, provide sovereign cloud- and AI-based procure-to-pay solutions and platforms for vertical markets, such as hospitality, healthcare, public sector, services – in both direct channel and white-label-partner business model. Founded in 2005 and with 150 employees in 3 legal entities at 2 locations in Germany and abroad, we are today one of the leading and most widely used "BPaaS" (Business-Process-as-a-Service) solutions for digital order and accounts payable management in some of its verticals in Germany, Austria and Switzerland. Since 2024, we are part of the Main Capital Partners portfolio. This partnership will drive our innovation and growth and expand our offering in international markets.

Our cisbox Suite is being used in over 20 countries worldwide. Thanks to our European origins, we have a high level of experience in working and integrating various accounting, data analysis, inventory and POS systems. We offer interfaces to more than 100 solutions, including DATEV, MS Dynamics, Onventis, Oracle, Qlik, Sage and SAP.

In 2023, cisbox was ranked in the Top 10 of the Main Software 50 Award Germany.

### Core offering for process optimisation.

Our mission is to improve and automate business processes, optimise the approval workflow and save time, money and resources. The services within our Suite are modular and scalable and ensure the complete integration of our middleware into existing customer systems.

Up to 100% of incoming invoices can be processed, not only electronic and digital invoices, but also paper invoices, too. We automate invoice control, e.g. price checks. We provide multi-stage approval processes with defined responsibilities. We automate bookkeeping on line item level, provide electronic payment, data analysis and monitoring in real time.

We guarantee GoBD-compliant archiving of all business transactions. We rely 100% on digital documents: Thanks to our certification, paper documents can be destroyed after digitisation.

### AI with business focus.

AI-supported functions from our own development contribute to the automation and optimisation of our operational processes and solutions.

When processing incoming invoices, various AI/ML methods and semantic technologies are used to optimise and automate processes. We also offer interactive AI solutions within our suite that support users during the account assignment process, for example.

In times of increasing resource scarcity and cost pressure, our solutions relieve users of routine tasks and provide recommendations for action and decision-making aids. In addition, the preference for our own language model ensures maximum data sovereignty for our customers.

### Ready for EN 16931. Connected with Peppol.

Companies that rely on our solutions are already able to receive and process electronic invoices in accordance with EN 16931. Our customers benefit from this service throughout Europe, regardless of the legal obligation that comes with the necessary implementation for receiving documents.

As a Peppol Certified Service Provider, cisbox is well-positioned and already providing e-invoicing via Peppol both for all its Procure-to-Pay-customers, and for their suppliers, too. Via the Peppol network, we guarantee the standardised and secure transport of the XML invoices, while our customers not only benefit from the future viability of these type of documents, but also do not have to take any further measures - and save money at the same time.

In combination with e-invoicing, this results in the perfect synergy - regionally and beyond European borders.
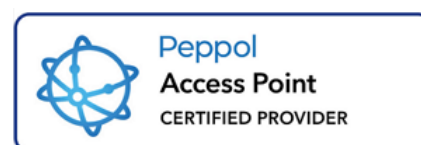
cisbox GmbH | Brühler Straße 58 | 42657 Solingen, Germany
**Web:** www.cisbox.com | **Phone:** +49 212 2315-0 | **Email:** bd@cisbox.com

## 7.8    COMARCH

Headquarters:

COMARCH
Jana Pawła II 39a
Kraków
Poland

**COMARCH**

| | |
|---|---|
| Countries with highest e-invoicing revenues | Poland, France, Germany, Romania, Italy, USA, Thailand, Bulgaria, Hungary, Turkey, Finland, Spain |
| Tax compliant e-invoice processing guaranteed for | AE, AU, AT, BE, BH, BR, BG, CA, CH, CL, CN,  CY, CZ, DE, DK, DO, EC, EG, EE, ES, FI, GB, GR, HR, HU, IN, ID, IE, IT, IL, JP, JO, KZ, KE, KR, KW, LV, LT, LU, MY, MX, NZ, NL, NO, OM, PE, PH, PL, PT, RF, RS, RO, SA, SE, SG, SK, SL, TW, TH, TR, US, VN |
| Number of employees dedicated to e-invoicing and directly related offer | 300 |
| Registered users on own e-invoicing platform | 180,000 aggregated |
| Processed volume on own e-invoicing platform | 100+ million e-invoices per year |
| Core offering | Cloud-based solutions for electronic exchange of all business documents including handling of entire invoice-related flows. It ensures B2G/B2B e-invoicing compliance in multiple countries. The core solution is enhanced by a variety of functionalities, which can be tailored to consumer needs. |
| Covered processes/messages along the supply chain | Full supply chain order-to-cash/purchase-to-pay and e-invoicing/e-reporting to government authorities. |
| Value-added services | Exchange of all document types, any-to-any integration, supply chain management, tailor-made supplier/customer portals, legally compliant e-archiving, e-reporting, e-transport, OCR, document enrichment and advance routing with government platforms, on-boarding services, rich experience in multiple industries. |
| Main target market segments | Large international enterprises from any industry. |
| Supported languages (with application/service and customer support) | English, French, German, Italian, Spanish, Polish, Dutch, Bulgarian, Hungarian, Romanian, Turkish, Ukrainian, Thai |
| Competitive differentiator | A flexible e-invoicing hub enriching the capabilities of government platforms worldwide (self-billing, payments, attachments, reporting) with e-reporting and e-transport compliance (e.g., in Romania and Turkey) and comprehensive electronic data interchange (EDI) capabilities: all document types, any-to-any mapping, business validations, n-way matching. |

## COMARCH

Comarch is a global IT challenger with a presence in 60+ countries and 90 local offices. Specializing in comprehensive IT solutions for diverse industries including retail, telecommunications, finance, and healthcare, Comarch collaborates with renowned businesses like MAN Bus&Truck, Danone, Metro Digital, Nestle, Carrefour, Leroy Merlin, BP, BIC, Unilever, Valeant, Valeo, Fazer, Technicolor, and many others.

Their flagship product, Comarch e-Invoicing, streamlines supply chain processes and enhances communication between business partners. The company's offering comprises a B2B network guaranteeing secure and reliable data transmission with over 180,000 entities worldwide. The solution ensures multi-ERP integration and compatibility with numerous other systems.  Comarch E-Invoicing global initiatives are underpinned by, among others, the changes in e-invoicing obligations in France, Germany, Spain, and other countries. We bring a wealth of experience in integrating both B2G and B2B interactions seamlessly. Comarch's solutions are legally compliant across 60+ countries, offering integration with government platforms such as France (Chorus Pro, AIFE), Italy (SDI), Finland (Tieto, Tieke), Germany (OZG, ZRE), Hungary (NAV), Romania (ANAF), Spain (Face), among others. Key features of Comarch E-Invoicing include:

- Any-to-any formats, standards conversion, and integration.
- Support of numerous communication channels.
- Legal and business data control adjusted to individual requirements.
- Support for various communication channels (e.g. AS2, AS4, SFTP, Web, API).
- Data monitoring and tracking to facilitate a prompt reaction to any problem.
- Configurable reporting on data exchanged via the platform.
- Scalable and flexible architecture.

- Electronic archiving facilitating fast access to archived documents from any place with access to the Internet.

Providing a global e-invoicing solution, over the past year, we have been actively engaged in various initiatives, including KSeF in Poland, PDP in France, and numerous others spanning countries such as Romania, Serbia, the Philippines, Thailand, and Malaysia.

As a PDP candidate in France's National Forum for e-invoicing (FNFE), Comarch remains at the forefront of industry trends, leveraging close ties with government institutes for the latest insights. Furthermore, Comarch holds certifications as an e-invoicing provider in the MEA region. Our accreditations and our own compliance team dedicated exclusively to electronic data interchange related issues further underscore our commitment to meeting international standards. Beyond e-invoicing, Comarch offers e-transport and e-reporting services, covering accounts payable and receivable processes.

As a member of OpenPEPPOL and a Certified PEPPOL Access Point, Comarch ensures swift electronic document exchange with public entities and businesses in the PEPPOL network. With PEPPOL Access Points across the EU, Japan, Australia, New Zealand, and certification as the sole European Electronic Tax Invoicing Service Provider in Thailand, Comarch demonstrates its commitment to international standards and compliance. Our PEPPOL-based interoperability extends to countries such as Belgium, Malaysia, Germany, and Spain.

Comarch's solutions are endorsed by industry leaders including Forrester and Gartner.

Website: www.comarch.com
Contact: Bartłomiej Wójtowicz, Comarch e-Invoicing Consulting Director
e-mail: bartlomiej.wojtowicz@comarch.com

### 7.9    DIGITAL TECHNOLOGIES (B Corp)

Headquarters: Milan

Digital Technologies Srl Società Benefit
Via Politi 10, Trezzano sul Naviglio,
20090 Milan, Italy

| | |
|---|---|
| Countries with highest e-invoicing revenues | Europe |
| Tax compliant e-invoice processing guaranteed for | **Worldwide Compliance**<br>In particular: Italy, Spain, France, Poland, Romania, Hungary, Germany, Nordics, India, Vietnam, Malaysia, Israel, China, Mexico, Serbia, Saudi Arabia, Japan, US |
| Number of employees dedicated to e-invoicing and directly related offering | 80+ |
| Registered users on own e-invoicing platform | Suppliers:     + 200.000<br>Buyers:        + 5.000 |
| Processed volume on own e-invoicing platform | + 100 millions per year |
| Core offering | SaaS (Software as a Service) - based on advanced technologies - focused on the following: Global e-invoicing & Legal Archiving, Hyperautomation, Supply Chain Finance and Corporate Sustainability Reporting. Our platform offers a wide range of services that facilitate the exchange of financial/commercial information among all stakeholders, ensuring worldwide regulatory compliance. |
| Covered processes/messages along the supply chain | Full Order-to-Cash and Procure-to-Pay automation, E-Invoicing, E-Reporting (customs, tax administration, ESG&CSRD, etc.), E-payment, Legal Archiving, E-Signatures, EDI services, Workflow management, Vendor/Customer management, Transportation management. |
| Value-added services | Digital Payments and Collection, Invoice Trading, Insurance services, SAP, and Corporate Sustainability Reporting. |
| Main target market segments | Mid to large companies and multinational enterprises in any industry, irrespective of their geographical location System integrators and software vendors with a full API solution |
| Supported languages (with application/service and customer support) | All languages are supported on request.<br>In particular: English, Italian, French, Spanish, German |
| Competitive differentiator | Tailored approach focused on business results, providing our customers with a single platform leveraging exponential technologies, such as AI, for full process automation and global compliance. |

## DIGITAL TECHNOLOGIES (B Corp)

Digital Technologies (DT) is an Italian **B Corp**, operating internationally in the business processes automation and digitalisation, designing SaaS platforms, based on the most advanced technologies.

**Cutting-edge solutions**
Our platform offers a wide range of services that facilitate the exchange of financial/commercial information among all stakeholders, ensuring worldwide regulatory compliance.
Our offer focuses on four areas:

- **Global e-invoicing & Legal Archiving:** solution that streamlines invoicing and archiving processes, while ensuring compliance with international legal requirements.
- **Hyperautomation:** cutting-edge automation solutions designed to streamline operations and tasks across various functions, boosting performance and efficiency.
- **Supply Chain Finance:** financial services aimed at optimizing supply chain management, ensuring seamless transactions and improved liquidity.
- **Corporate Sustainability Reporting:** CSRD compliant reporting.

**E-Invoicing and Legal Archiving Platform**
In a complex scenario, characterised by the fragmentation and lack of standardization of electronic invoicing initiatives, our global e-Invoicing platform simplifies and automates the B2G, B2B, B2C process management, both for Account Payables and Receivables. Guarantee of worldwide compliance, it allows to delegate all the technical, operational and security aspects to a single point of contact providing continuous conformity with the regulatory provisions in force in each Country. With specific regards to e-invoicing, DT provides the following functionalities:

- multi-format input management
- creation of the e-document in the required format (XML, UBL, UN/CEFACT CII, Peppol, national formats, etc.)
- conversion of the e-document into the format required by the trading partner

- editor for document creation via platform
- electronic signature application
- e-invoice transmission and reception, multi-channel Input/Output (Peppol, national infrastructures, EDI, etc.)
- automatic validation, checks and controls
- document status evidence & tracking
- export and download
- real-time monitoring and reporting
- Legal Archiving, depending on regulations
- full API integration
- cross-country integration layer
- full integration with existing ERPs

**E-Invoicing and Legal Archiving Certifications**
UNI EN ISO 9001:2015 - UNI EN ISO 27001:2018 - UNI EN ISO 14641 - UNI EN ISO 37000 - ISAE 3402 - PEPPOL Open Point - eIDAS compliant.

**Boosting performance with Hyperautomation**
The solution can be completed by our Hyperautomation Suite, based on AI, enabling the full automation of Supply Chain processes.
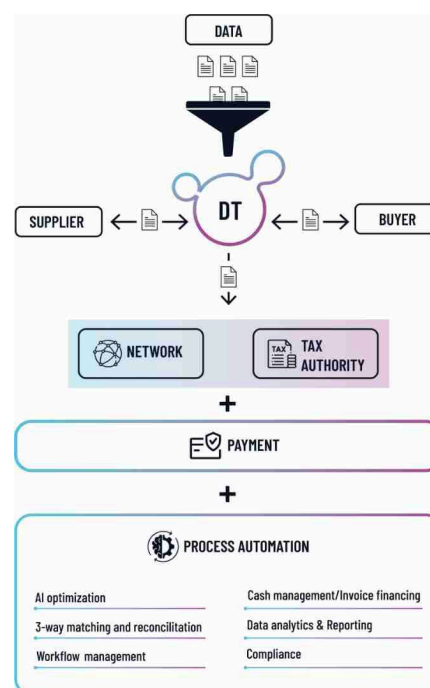


Website: www.digtechs.com; Contact: Enrico Liverani, eliverani@digtechs.com

The global e-invoicing and tax compliance report: Watch the tornado!

Sponsor

## 7.10   Dynatos

Headquarters:

Dynatos
Veldkant 35D,
2550 Kontich,
Belgium

| | |
|---|---|
| Countries with highest e-invoicing revenues | Belgium, The Netherlands, Finland, Germany, Italy, Norway, Denmark, Sweden .. |
| Tax compliant e-invoice processing guaranteed for | European Union, Malaysia. |
| Number of employees dedicated to e-invoicing and directly related offering | 50 |
| Registered users on own e-invoicing platform | Suppliers:     750<br>Buyers:        1,500 |
| Processed volume on own e-invoicing platform | 5+ million e-invoices per year |
| Core offering | Cloud SaaS e-invoicing, CTC compliance, AP & AR automation ... |
| Covered processes/messages along the supply chain | Full e-delivery trade cycle: Order-to-cash/purchase-to-pay, e-invoicing and e-reporting to authorities. |
| Value-added services | Finance & Procurement transformation: E-invoicing, ERP agnostic Accounts Payable & Accounts Receivable automation, SAP Automation, Purchase-to-Pay, Intelligent Document Processing, implementations. |
| Main target market segments | Balanced offering for large & mid-market companies in any industry. |
| Supported languages (with application/service and customer support) | English, Dutch, French, Spanish, German, Danish, Norwegian |
| Competitive differentiator | ERP and network agnostic multi-format e-invoicing/e-delivery SaaS platform to unburden organisations with their transition to e-invoicing, ensuring compliance and control through fast integration with the existing ERP systems. |

**Routty by Dynatos**

Routty is a cloud-native SaaS platform powered by Microsoft Azure for e-invoicing and e-delivery. Designed to accelerate digital transformation, Routty streamlines purchase-to-pay and order-to-cash processes with unmatched efficiency.

**Overcome Business Challenges**
As e-invoicing becomes mandatory in more regions, staying compliant with evolving tax laws is crucial. Manual invoice processing drives up costs and increases the risk of errors, penalties, and missed opportunities for early payment rebates. Traditional on-premise systems are costly and cumbersome, often slowing down digital transformation efforts due to outdated formats and inefficient workflows.

**Key Benefits**
Routty reduces processing times, integrating invoices into your ERP system within minutes. Automating end-to-end delivery helps prevent fraud and ensures compliance with government mandates. Transform your AP and AR processes into efficient, zero-touch operations. Reduce manual work, improve data accuracy, and foster stronger supplier relationships by avoiding late payments and capitalizing on early payment discounts. As a cloud-based SaaS platform, Routty guarantees you always use the latest software without the hassle of updates or installations.
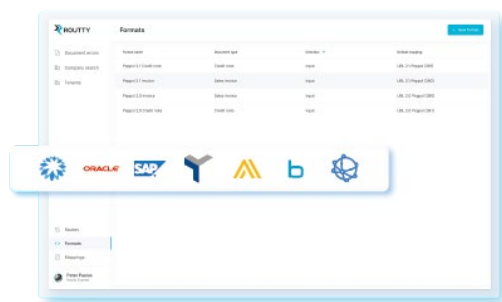
**Standout Features**
With Routty, onboarding is seamless and disruption-free. The platform offers a rich library of pre-built connectors, document formats, and ERP integrations, enabling you to go live quickly. Its open API and extensive connector library ensure smooth integration with any IT system or network, allowing you to send and receive documents in multiple formats across various channels. Routty is built to scale with your business, supporting both small operations and large enterprises with complex needs.

**Technical Excellence**
Routty is a certified Peppol access point that seamlessly integrates with SAP and other ERP systems via an open RESTful API. It supports a wide range of XML formats for e-invoicing, with the flexibility to add new ones as needed. The platform features an intuitive point-and-click interface for easy configuration, automatic document identification, and robust error logging. It integrates securely with the cloud-based Active Directory and offers role-based access control for different user levels. Built on the reliable Microsoft Azure platform, Routty ensures top-tier availability, security, and compliance.

Embrace the future of invoicing and document exchange with Routty—efficient, compliant, and always up to date.

Website: www.dynatos.com www.routty.io
Contact: www.dynatos.com/contact

### 7.11    ecosio | Vertex

**ecosio:** Lange Gasse 30, 1080 Vienna, Austria
**Vertex:** 2301 Renaissance Blvd, King of Prussia, PA 19406, USA

| | |
|---|---|
| Countries with highest e-invoicing revenues | Germany, Austria, and Switzerland |
| Tax compliant e-invoice processing guaranteed for | 40+ countries worldwide |
| Number of employees dedicated to e-invoicing and directly related offering | 200+ |
| Registered users on own e-invoicing platform | 2,700 |
| Processed volume on own e-invoicing platform | >100m invoices exchanged annually |
| Core offering | ecosio and Vertex's cloud-based e-invoicing solution provides scalable and simplified reporting and e-invoicing through a single integrated platform, enabling organisations to optimise real-time VAT compliance and e-invoicing processes for multiple countries. |
| Covered processes/messages along the supply chain | The integrated platform is designed to streamline the entire e-invoicing process including mapping, validation, signature & verification, submission, tracking, clearance, and archiving of e-invoices. |
| Value-added services | End-to-end message visibility, ERP integration via API, routing via all EDI protocols, mapping to/from all EDI formats, easy partner onboarding, message monitoring and error resolution. |
| Main target market segments | Organisations with multi-national operations and multi-country VAT requirements. |
| Supported languages (with application/service and customer support) | English and German - personnel include native speakers who provide support in over 15 different languages. |
| Competitive differentiator | ecosio and Vertex support a shared vision to accelerate global commerce and provide customers with a scalable system that integrates VAT compliance and reporting into a user-friendly platform. The end-to-end offering provides customers with a centralized option to manage tax determination, real-time and periodic reporting, filing, and e-invoice compliance for both accounts receivable (AR) and accounts payable (AP). Additional functionality includes reconciliation to Vertex VAT Compliance (including ESL). |

The global e-invoicing and tax compliance report: Watch the tornado!

Sponsor

**ecosio | Vertex**

### The power of collaboration: ecosio | Vertex

With the increasing scope and drive for real-time and near real-time digital tax reporting mandates, e-invoicing is rapidly evolving into a crucial requirement for businesses operating across multiple jurisdictions. Combining ecosio's extensive e-invoicing technology with Vertex's best-in-class indirect tax solution provides customers with an unparalleled global experience for indirect tax reporting, e-invoicing, and continuous compliance.

### Effortless e-invoicing at your fingertips

ecosio and Vertex's end-to-end concept is designed to simplify the entire e-invoicing process including creation, validation, signature & verification submission, transmission, clearance, and e-archiving of e-invoices in compliance with jurisdictional mandates for B2B/B2G transactions. ecosio's cloud-based network provides easy connection to source financial systems and invoice clearance platforms worldwide. This powerful tool allows companies to achieve and maintain compliance with current and emerging local digital VAT regulations, including VIDA, with ease.

This flexible e-invoicing system is connected to ERPs such as SAP, Oracle, and Microsoft for seamless AR and AP data transmission. Customers can easily streamline network support and automate data transmission from the source system. Data is then validated, converted, and exchanged according to each jurisdiction's technical requirements. Users no longer need to configure and customize the required formats for each jurisdiction. Instead, everything is handled automatically.

### End-to-end VAT compliance

In addition to simplifying e-invoicing and VAT compliance hurdles, this joint approach also helps businesses to address other key finance challenges by enhancing cash flow management, improving finance metrics such as days sales outstanding (DSO) and return on investments (ROI), and integrating tax processes for AR and AP.

E-invoicing is just one corner of Vertex's scalable, end-to-end VAT compliance suite. The combined solution supports customers at more points through their compliance and electronic data interchange processes.

### Scalability through expanding automation

The recent surge in e-invoicing and real-time tax reporting legislation shows a clear trend towards automated B2B processes becoming mandatory. With ecosio's EDI expertise, businesses are well positioned to expand automation beyond e-invoicing to other key processes.

Website: ecosio.com, www.vertexinc.com

Contact:  ecosio, Vertex e-Invoicing

# Exchange
*exchange-summit.com*

## Meet decision-makers and service providers at the E-Invoicing Exchange Summit!

**Visit exchange-summit.com for details and registration.**

# Global Exchange Network Association

Fostering a Trustworthy Global Ecosystem for
Seamless and Secure Digital Data Exchange

✻ GENA

Founded in 2011 as EESPA, GENA has evolved into a dynamic community with over 100 full and associate members (04/2024). The organization also operates through Local and Regional Chapters in Germany, Italy, the Nordics, and the Middle East (other chapters are in formation).

**The vision of GENA is to pursue a trustworthy ecosystem of interoperable networks through which end-to-end digital invoices and other commercial data can be seamlessly exchanged and automatically processed by suppliers and buyers anywhere in the world connecting only once to a participating broker acting under a rules framework that encompasses appropriate statutory reporting.**

Specific current examples of programmes of activities and areas of attention include:

**Public Policy and Compliance**
GENA's Public Policy and Compliance Working Group (PPCWG) pillar creates awareness and action around critical developments in the global area of e-invoicing, such as ViDA (VAT in the Digital Age) and Continuous Transaction Controls. The working group actively seeks collaboration with decision - and policy makers.

**Interoperability**
GENA's Interoperability working group (IWG) is managing activities to develop a common framework and best practices to facilitate the  exchange e-invoices and other electronic business documents between service providers. E-Invoicing mandates and upcoming ViDA regulation are driving factors to define the network of the future combining compliance and automation.

**Reach-out and research**
GENA supports members in scaling their capabilities by offering market insights, maintaining a reputable website, publishing newsletters on global and country developments, focusing on related areas like e-procurement and supply chain finance, and creating strategic alliances with organizations like OpenPeppol, DSPANZ, ... to extend the scale and scope of GENA activities.

On top of formal activities, the GENA community provides unrivalled opportunities for informal networking and learning. These relationships can lead to new partnerships based on trust and familiarity.

## Join our community today!

# www.gena.net

**7.14    Global Healthcare Exchange, LLC (GHX)**

Headquarters:

Global Healthcare Exchange, LLC (GHX)
1315 W. Century Drive
Louisville, Colorado 80027
USA

| | |
|---|---|
| Countries with highest e-invoicing revenues: | United States, Canada, Germany and United Kingdom. |
| Tax compliant e-invoice processing guaranteed for: | Germany, Netherlands, Switzerland, United Kingdom, Belgium, France, Spain, Portugal, Italy, Sweden, Finland, Norway and Denmark. |
| Number of employees dedicated to e-invoicing and directly related offering: | Not available. |
| Registered users on own e-invoicing platform: | Suppliers:    600+<br>Buyers:        19,000+ |
| Processed volume on own e-invoicing platform: | Tens of millions per year. |
| Core offering: | Full order-to-cash automation, order channel consolidation, e-invoicing, product information management, consulting services and advanced technology for healthcare organizations, helping them to meet the legislative requirements in the countries they operate. |
| Covered processes/messages along the supply chain: | Invoices, purchase orders, purchase order acknowledgements, advance ship notices, catalogue and contract. |
| Value-added services: | Business document conversion and validation, data optimization, catalogue and contract management, procurement, inventory management, business intelligence and reporting tools. |
| Main target market segments: | Healthcare medical-surgical manufacturers, distributors, hospitals and group purchasing organizations. |
| Supported languages (with application/ service and customer support): | English, German, Spanish, French, Dutch, Portuguese and Italian. |
| Competitive differentiator: | Strong healthcare expertise in supply chain automation and integration technology, operating the biggest B2B network in healthcare. Our customers form the largest community in healthcare, and collectively saved over $1.7 billion in the last year by using GHX solutions. |

The global e-invoicing and tax compliance report: Watch the tornado!

Sponsor

## Global Healthcare Exchange, LLC (GHX)

GHX enables better patient care and billions in savings for the healthcare community by maximizing automation, efficiency and accuracy of business processes.

### Healthcare Supply Chain Automation

Supply chain is the 2nd largest and fastest growing area of spend in healthcare, accounting for 40 - 45% of operating expenses. Hospitals can reduce supply chain costs by 5 - 15% if they better analyze, plan and control the purchase and use of goods and services, gaining a profit increase of 2 - 7%.[1] For suppliers to hospitals, supply chain automation optimizes the order-to-cash cycle, reducing the effort associated with order management by up to 75%, reducing the cost of processing invoices manually by up to 40%, and the time invoices are paid by up to 30%.[2] GHX has a strong expertise and state-of-the-art solutions to help turn an inefficient supply chain into a strategic asset with reduced operating costs.

### GHX statistics

➢ 15,000+ supplier divisions and 19,000+ healthcare provider facilities in North America and Europe, forming the largest trading community in healthcare
➢ 896,000+ trading partner connections established on the Exchange (85% of market in North America and over 50% in Europe)
➢ 166+ million POs and invoices processed through the GHX Exchange in the last 12 months, representing $128+ billion in volume of supply spend
➢ $1.7+ billion in healthcare savings achieved by GHX customers in the last 12 months alone

In addition, GHX offers a number of **business intelligence and reporting tools** for customers to enable them to make informed strategic decisions. GHX is also a leading provider of services that help industry **adopt and synchronize global or regional data standards**.

1.) *Supply Chain Consultants and Outsourcing Providers for Healthcare Delivery Organizations. Gartner Research; 5 July 2011.*
2.) *GHX value study*

### GHX eInvoicing solution | an overview

The GHX eInvoicing solution helps suppliers navigate the complexity of the EU marketplace and complies with the invoicing regulations mandated by the member states. Through a single connection (supplier's ERP), GHX eInvoicing helps issue and distribute invoices in the correct format to the destination required. In addition, suppliers can deliver invoices to customers through an online portal, giving better visibility, reducing manual processes and enhancing the customer experience.

### GHX eInvoicing solution | Why GHX?

#### 1| Compliance throughout Europe

➢ Meets electronic invoicing regulations, ensuring compliance of business continuity across EU markets
➢ eInvoice delivery to government entities or direct to customers including digital signature and archiving

#### 2| Visibility and analytics

➢ Single sign on with Pan-European visibility of invoices including delivery and receipt status
➢ Invoice data analytics for cost and cash flow management

#### 3| Reduced costs and processing times

➢ Shorten invoice delivery time by removing mail delivery and processing delays
➢ Leverage three-way matching of PO, delivery confirmation, and invoices to quickly identify payable invoices
➢ Invoices delivered electronically, leveraging email notification and a secure portal environment
➢ Reduces time that suppliers spend resending invoices to customers

#### 4| Increased customer satisfaction

➢ Enables customers to download and print invoices
➢ Overview of invoices to customers in one place

Contact: contact@ghxeurope.com | www.ghx.com/en

## 7.15    InExchange

Headquarters:

InExchange Factorum AB
Kaplansgatan 16E
541 34, Skövde
Sweden

| | |
|---|---|
| Countries with highest e-invoicing revenues | Sweden |
| Tax compliant e-invoice processing guaranteed for | Sweden, Norway, Finland, Denmark, Iceland |
| Number of employees dedicated to e-invoicing and directly related offering | 120 |
| Registered users on own e-invoicing platform | Suppliers:     150 000<br>Buyers:        50 000 |
| Processed volume on own e-invoicing platform | 80 000 000 |
| Core offering | E-invoicing Network Service, Invoice distribution, Invoice interpretation, Tax compliance, electronic market place, SaaS (Software as a Service). |
| Covered processes/messages along the supply chain | Order 2 cash, purchase to pay. |
| Value-added services | Invoice Finance, Format management, Web interface, Remind and debt collection, Industry specific invoice management. |
| Main target market segments | Large suppliers in any industry, SME and ERP/software providers. |
| Supported languages (with application/service and customer support) | Swedish, English. |
| Competitive differentiator | Revolutionizing system development with cutting-edge expertise tailored for today's and tomorrow's needs. We seamlessly integrate business and accounting systems to empower a network of over a million users, setting new industry standards. |

## INEXCHANGE

### Our Story

"We aim to be leaders in the realization of the digital society." That's the ambition at InExchange. It's about offering services that make the processing of business documents faster, safer, more efficient, and less costly. InExchange was founded in 2008 and within a few years became one of the leading companies in the industry in the Nordic region. The next step in the expansion took place in 2016 when InExchange joined the Norwegian group Visma. Since then, the company has continued to grow steadily in terms of connected customers, transaction volume, and the number of employees.

Additionally, there has recently been further expansion. On January 1, 2024, InExchange merged with Scancloud, which has also been part of the Visma group for several years. The formation of a company under the name InExchange has also meant a geographical expansion. Now, InExchange has offices in Skövde, located in western Sweden, in the capital Stockholm, and in Östersund, which is further north in the country.

### Our Services

Thanks to the merger of InExchange and Scancloud, the services from each company have united into one. This has created a complete solution that covers both incoming and outgoing invoices. Thus, only one supplier is needed to meet all needs including accounting. Since InExchange owns all systems and solutions, customers have access to a One Stop Shop (OSS) for everything related to invoice flows.

The e-invoice will always be central to InExchange. Even though scanning and interpretation are now available within the company – no longer purchased from a partner – the primary intention is to help customers become fully digitalized in the processing of invoices. Scanning is a tool that accelerates the transition. As an integrated service in a complete system, it becomes easier to make the customer aware of which suppliers can send electronically.

### The Future

With environmentally friendly digital services that simplify for companies and organizations and an operational capacity that enables new ventures, InExchange is perfectly positioned to continue to grow. The company is today one of the leading players in data-driven business communication in the Nordic region and also Sweden's by far largest access point in Peppol.

But what has been achieved so far is not an end goal.

Rather, it's just the beginning of continued expansion in the market.

Website: www.inexchange.se
Linkedin: www.linkedin.com/company/inexchange-factorum-ab/

### 7.16    Invopop

Headquarters:

Invopop S.L.
C. de Pradillo, 42
Madrid
Spain

| | |
|---|---|
| Countries with highest e-invoicing revenues | France, Spain, Portugal, Italy, Mexico, and Poland |
| Tax compliant e-invoice processing guaranteed for | More than 20 countries, including France, Spain, Portugal, Italy, Austria, Netherlands, Germany, Poland, United Kingdom, Greece, Mexico, Colombia, Canada, United States. |
| Number of employees dedicated to e-invoicing and directly related offering | 10 |
| Registered users on own e-invoicing platform | +100 |
| Processed volume on own e-invoicing platform | 1 million invoices per year |
| Core offering | Automatically issue invoices that comply with local requirements, including fiscalized PDFs, e-invoices, and e-reporting to tax authorities. |
| Covered processes/messages along the supply chain | Billing, invoicing, reporting to tax authorities, payment reconciliation and accounting into ERP |
| Value-added services | Thanks to Invopop's no-code workflows, users can add automatic actions to their invoicing processes such as e-mails, Slack messages, PDF, e-signatures, syncing to and from billing, ecommerce, POS tools and ERPs |
| Main target market segments | B2B SaaS (vertical solutions, ERPs, payments) Marketplaces Global software companies |
| Supported languages (with application/service and customer support) | English and Spanish |
| Competitive differentiator | Invopop is based on GOBL (https://gobl.org/), the first open-source global e-invoicing project, which paired our workflow engine, allows customers to launch new invoicing use cases or expand to a country in days instead of months. |

## Invopop: global e-invoicing for developers

### Why we started Invopop

Invopop is a SaaS that helps global companies comply with the local invoice requirements of more than 20 countries. Our API receives invoice information in a universal format, converts it to the regional format (PDF or XML e-invoice), and reports it to the tax authorities if needed.

Invopop was established in 2020 by Sam Lown, the co-founder and CTO of Cabify, Spain's first tech unicorn. When Cabify expanded to ten countries in LatAm in three years, Sam sought a global e-invoicing provider, but couldn't find one that fit the needs of modern developers.

### Define your invoicing workflows with no-code

Invopop users can configure the actions to execute on an invoice without any coding skills (no-code), thanks to our workflow engine.



When our API receives an invoice, it executes a set of actions (a workflow). These actions can include

- E-sign the invoice
- Convert to local e-invoice format
- Report to the local tax authority
- Generate a custom-branded PDF
- E-mail the invoice to stakeholders
- Sync information back to the ERP
- Raise a webhook

The workflow engine is also responsible for queuing jobs, handling errors, and smartly retrying when services such as local tax authorities are slow.

### Console

The Console is the dashboard that Invopop's customers can use to manage the integration, consult invoices, or edit or amend an invoice without needing code.

Try it out for free in console.invopop.com



### GOBL: One open-source format for +20 regimes

Invopop is based on GOBL, an open-source project created and maintained by us to make it easier for developers to build, share and convert invoices globally.

GOBL defines a universal invoice format based on JSON Schema, which is the input to our API. The project also contains a library of country taxes rates and invoice validations (e.g., tax id) and converters to local e-invoices like FatturaPA, Xrechnung or CFDI.

GOBL invoices fully comply with EN 16931, the European eInvoicing standard which countries must follow when defining their own e-invoices.

### Customers

Companies in more than 40 countries use Invopop to issue more than one million invoices a year. We specialize in technological companies like B2B SaaS, vertical solutions, marketplaces, ERP integrators, and system consultants.

Get in touch today!

Website: www.invopop.com | Contact: sales@invopop.com or www.invopop.com/contact

**7.17     JustOn – We automate financial processes in Salesforce**

Headquarters:

JustOn GmbH
Mälzerstraße 3
07745 Jena
Germany

| | |
|---|---|
| Countries with highest e-invoicing revenues | Germany, France, United States of America, European Union |
| Tax compliant e-invoice processing guaranteed for | Germany, France, Denmark, Norway, Finland and worldwide |
| Number of employees dedicated to e-invoicing and directly related offering | 25 |
| Registered users on own e-invoicing platform | Suppliers:     250+ |
| Processed volume on own e-invoicing platform | 5 Mill.+ invoices per year |
| Core offering | Software as a Service platform for monetization Tax-compliant invoicing and e-invoicing for subscription-based recurring revenue, one-time sales and usage data billing (SaaS, marketplaces, commissions), and payment reconciliation |
| Covered processes/messages along the supply chain | Full trade cycle contract-cash-payment plus accounting support and transparent reporting |
| Value-added services | 100 % integration with Salesforce CRM Payment services (banking, payment service provider, SEPA direct debit, payment reconciliation) Debtor and creditor management Accounting support (account allocation, booking detail creation, data transfer to accounting systems) |
| Main target market segments | JustOn products are suitable for various industries, e.g. SaaS, media, publishing and professional services. Suppliers (SMBs) with an outgoing invoice volume of few invoices up to 50.000 and more invoices per month |
| Supported languages (with application/service and customer support) | English, German, French |
| Competitive differentiator | JustOn offers sophisticated solutions for invoicing and e-invoicing recurring revenues and one-time scenarios as well as usage-based billing, developed and supported by an inhouse team of billing experts. Unique values are the limitless extensibility, very fast implementation cycles and personal customer care. |

## JUSTON – WE AUTOMATE FINANCIAL PROCESSES IN SALESFORCE

### JustOn gives you time – Benefits at a glance

JustOn software products automate your financial processes – from credit check to invoicing, accounts receivable and accounts payable management, and data transfer to accounting systems. Our core business and our strength is invoice, e-invoice and payment management based on the Salesforce Platform. The main apps JustOn Billing & Invoice Management and JustOn Cash Management are developed natively and integrate 100% with Salesforce CRM. Users of these software products

- reduce costs by automating and standardizing financial processes,
- minimize the risks of data errors and improve the data management,
- evaluate their key financial figures like MRR, cash flow or churn rates,
- improve their liquidity management.

### Monetize any pricing model

JustOn Billing & Invoice Management is ideal for monetizing innovative business models. No matter if your pricing model is based on subscriptions (recurring revenue), one-time sales of products and services (orders) or usage-based data – our software gets you covered.

### Fully automated invoicing & e-invoicing

For invoicing, the software runs all necessary tasks automatically and without any user interaction. It retrieves all relevant data from your CRM, ERP, project management or issue tracking systems as the basis for the invoice generation. The produced invoices and e-invoices are then automatically sent, uploaded, organized and archived – in compliance with applicable tax regulations.

### Payment registration and reconciliation

JustOn Cash Management integrates Salesforce CRM with banks or payment service providers. The app allows you to trigger payments and track payment information, reconciling your receivables and payables.

### Overdue receivable management

JustOn software solves your challenges in managing overdue receivables. It can automatically issue account statements and dunning reminders according to your conditions. If the dunning communication remains unfruitful, the software can start individual value adjustments or write off the receivables.

### Bookkeeping support

JustOn allows for writing bookkeeping data for revenues and taxes from finalized invoices and for registered payments. At that, it associates it with the relevant bookkeeping accounts. The produced data can then be transferred to your bookkeeping system.

### Accounts payable management

JustOn software enables you to control, manage and process your incoming invoices.

### Companies worldwide trust in JustOn

More than 250 well-known companies automate their financial processes with our applications and thus significantly shorten their process chains. These customers appreciate the advantage that JustOn products integrate seamlessly with Salesforce CRM, offering the same security, flexibility and extensibility.

### JustOn as Salesforce Partner

Our company was founded in 2010 and is based in Germany. Since our foundation, we have worked closely with Salesforce. As an official Salesforce ISV Ridge Partner we use the Platform as a secure, stable and scalable environment. Our products are offered on the Salesforce marketplace AppExchange.

Website: www.juston.com
Contact: Marko Fliege (CEO), +49 3641 5598580, service@juston.com

## 7.18    KBC Invoicing Services

Headquarters:

**KBC Invoicing Services, powered by Soluzio**
Zwartzustersvest 24
2800 Mechelen - Belgium

| | |
|---|---|
| Countries with highest e-invoicing revenues | Belgium |
| Tax compliant e-invoice processing guaranteed for | Belgium, France, Netherlands, UK, Germany, Spain, Italy |
| Number of employees dedicated to e-invoicing and directly related offering | 37 |
| Registered users on own e-invoicing platform | 2400 |
| Core offering | E-invoicing Network Service, Certified Peppol Access Point, International Invoice Compliance, (EDI) Business Network Interoperability, Archiving service, Plug & play integration, SaaS platform centralising all your invoicing flows |
| Covered processes/messages along the supply chain | Full Trade Cycle Order-Invoice-Payment, Electronic invoicing and reporting to authorities |
| Value-added services | Smartsending & receiving, Geomap global compliance, Invoice Finance, Hybrid Services (electronic and paper processing), Payment Services, Debtor Management, Cashflow prediction, … |
| Main target market segments | Belgian MidCaps and foreign subsidiaries in any industry |
| Supported languages (with application/service and customer support) | Dutch, French, English, German |
| Competitive differentiator | Fully integrated with financing solutions with the largest Belgian financial institution KBC Bank, KYC and data security processes, 'smart' digital E-invoicing tools, + 20 year market and technology maturity with large reference base |

**KBC Invoicing Services,
a smart and secure way to manage your invoices in Belgium and internationally**

Managing a company begins with good management of your **working capital**. Central to that story are the invoice flows. That really is the heartbeat of a business, and a central mission of **KBC Bank** in supporting its customers. Having control over your working capital, also means that your company has a good repayment capacity. And everyone benefits from that.

KBC Bank has been providing services to companies to help them **manage** those **financial flows**. For a long time, that has gone far beyond providing credit solutions. Looking at how companies can simplify and digitize their invoice flows, that was the logical next step.

In 2019, this ambition gave birth to **Soluz.io**, a joint venture between KBC Bank and Arco Information, which had already built up considerable experience in the social-profit sector around document management.  With the capital contribution of KBC and the software code of Arco Information, Soluz.io built its e-invoicing solution and was launched. Today, Soluzio is the exclusive E-invoicing partner of KBC Bank and its Commercial Banking customers. And that has its reasons.

Our KBC Invoicing Services offer can fall back on a number of Unique Buying Reasons. An important one is **data security**. Because of the security requirements that KBC as a bank must meet, including those relating to **cybersecurity** and **KYC** (Know Your Customer), Soluz.io is one of the most compliant and secure providers of e-invoicing solutions. These solutions range from **smart transition** towards **e-invoicing** via **Peppol** to **international connectivity** with various networks.

From our e-invoicing solutions, we further let the **synergy** play. Thanks to the data on invoice flows – whereby each customer chooses how much and which of that data to share - KBC can offer much more customization in **invoice finance** and other **financial products**. But the main strength of KBC as a partner of Soluz.io, is the stability it brings.

The focus now is on financial data, but solutions are being developed in the area of **sustainability reporting**, and **VAT e-reporting**.

A Swiss army knife for existing and future data reporting and flows.

Website: www.kbc.be/en/invoicingservices and www.soluz.io
Contact: Olivier Smekens , olivier.smekens@soluz.io , 0032 468 05 00 44

## OpenPeppol

Headquarters: Brussels

OpenPeppol AISBL
Rond-point Schuman 6, box 5
1040 Brussel, Belgium

| | |
|---|---|
| Countries with OpenPeppol members | AM, AE, AT, AU, BE, CA, CH, CN, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, IE, IN, IS, IT, JP, LI, LT, LU, LV, MD, MT, MX, MY, NL, NO, NZ, PL, PT, RO, SE, SG, SI, TR, UA, US, ZA |
| Countries with Peppol Authorities | AU, BE, DE, DK, FI, GB, GR, IE, IS, IT, JP, LU, MY, NL, NO, NZ, PL, PT, SE, SG |
| Registered users on connected eInvoicing platforms | More than 1,000,000 |
| Processed volume on connected eInvoicing platforms | More than 100,000,000 per year |
| Core offering | Peppol Interoperability Framework, providing specifications, network and governance |
| Covered processes/messages along the supply chain | Messages for invoicing, VAT reporting, procurement, logistics |
| Main target market segments | Public and private sector, B2B, B2G |
| Supported languages (with application/service and support | English |
| Competitive differentiator | Four-corner model providing single point of connection between end users through network of service providers |

# Peppol

## Peppol is what we do

We improve business efficiency between organisations by standardising the way electronic information is structured and exchanged.

Peppol is the name of our Network and Message specifications, and includes legal agreements, governance and compliance.

Peppol business document exchange services are delivered to buyers and sellers by Peppol-certified Service Providers, not by OpenPeppol.

## OpenPeppol is who we are

OpenPeppol is a not-for-profit, member-led international association, based in Belgium. It was established in 2012 as a follow-up to the EU-funded 2008 eProcurement and eInvoicing large-scale pilot.

OpenPeppol members come from the public and private sectors, with membership continuously growing all around the world.

## Global interoperability

Peppol has developed the Peppol International Invoice, creating a data model that enables domestic and cross-border interoperability.

## Peppol stakeholders

End users of Peppol services are buyers and sellers and do not need to be members of OpenPeppol to send and receive eInvoices.

Peppol-certified Service Providers send and receive eInvoices for their end user customers, providing business process interoperability.

Peppol Authorities are government agencies that drive the adoption of Peppol in their jurisdiction, primarily for eInvoicing efficiency benefits and increasingly for consumption tax reporting.

## Peppol reach

Twenty countries have established Peppol Authorities. There are more than one million end users registered to receive Peppol messages from 366 Peppol-certified Service Providers in 45 countries across Europe, Asia-Pacific, Middle East and North America.

## More information

Website:     www.peppol.org

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**Peppol**

Connect once – reach all

## 7.20  OpenText

Headquarters:

OpenText
275 Frank Tompa
Waterloo, ON N2L 0A1
Canada

| | |
|---|---|
| Countries with highest e-invoicing revenues | France, Germany, UK, USA, Italy |
| Tax compliant e-invoice processing guaranteed for | 48 countries – AND, ARE, AUS, AUT, BEL, BGR, CAN, CHE, CYP, CZE, DEU, DNK, EST, ESP, FIN, FRA, DEU, GBR, GRC, HKG, HRV, HUN, IRL, ISR, IND, ISL, ITA, JPN, LIE, LTU, LUX, LVA, MAR, MCO, MLT, MEX, NLD, NZL, POL, ROU, SAU, TUR, SWE, SGP, SVN, SVK, USA, ZAF |
| Number of employees dedicated to e-invoicing and directly related offering | >1,000 |
| Registered users on own e-invoicing platform | > 1,100,000 connected businesses (suppliers and buyers) |
| Processed volume on own e-invoicing platform | >4 billion e-invoices per year |
| Core offering | OpenText e-invoicing compliance, automation and management solutions for AP and AR; OpenText fully managed B2B platform for SMEs and Enterprises); OpenText AP automation solution for SAP user |
| Covered processes/messages along the supply chain | End-to-end physical and financial supply chain automation – from order through to invoice and payment. Support for all standards and messages. Compliant e-Invoicing and e-Reporting to tax administrations. |
| Value-added services | Trading partner on-boarding services; Secure community management; Vendor portal; OCR services; Accounts Payable automation |
| Main target market segments | Large Enterprises – from the simplest to the most complex e-invoicing scenarios. Cost-effective solutions for small / medium sized organizations. |
| Supported languages (with application/service and customer support) | English, French, German, Italian, Spanish, Japanese, Korean, Portuguese, Chinese. |
| Competitive differentiator | E-Invoicing is fundamentally a B2B integration challenge and OpenText is the market leader with the world's largest global business network. OpenText is the only global e-Invoicing solution agnostic to AP and AR systems and direct and indirect materials invoice processes. |

## OpenText

With the proliferation of e-Invoicing mandates, increasing numbers of standards, formats, and government portals to connect to, e-Invoicing remains very much an integration challenge.

OpenText operates the world's largest business integration network with over 1.1m connected businesses and over 33 billion transactions per year.

OpenText has provided electronic invoicing solutions globally for over 40 years. Today, we provide e-invoicing services for thousands of enterprises with SaaS and outsourced options to suit each customer's specific e-invoicing requirements.

### Outbound e-Invoicing

OpenText enables vendor companies to fully automate and digitize their invoice processs with their their largest and smallest buyers. Suppliers create electronic invoices directly from SAP, Oracle, or other enterprise accounting applications and we extract the invoice data, converting data into the buyer's preferred electronic invoicing format or the format mandated by law in the particular territory.

Create and send compliant PDF invoices to smaller businesses who do not have automated ERP/accounting systems. Our autoprovisioning capability allows us to do this at unprecedented scale, enabling tens of thousands of compliant PDF receivers with no delay or cost.

### Business to Government (B2G E-Invoicing)

OpenText supports B2G e-invoicing in a range of countries and formats, including PEPPOL.

### INBOUND E-INVOICING

OpenText delivers your supplier invoices and other documents according to your accounts payable system's required format. As a result, invoices flow directly from suppliers into your enterprise systems without the need for manual intervention – enabling straight-through processing.

For inbound e-invoicing we also provide:
- Regulatory compliance in more than 48 countries
- Optional AP automation with Vendor Invoice Management (VIM) for SAP users

### E-Invoicing with non-digital trading partners.

We provide a range of cost-effective connectivity solutions for enterprises to integrate with their non-digital trading partners.
- Web-based vendor portal
- Microsoft Excel®-based connectivity
- OCR as a service

### E-Invoicing Compliance

Our solutions ensure compliance within the EU, North America, Latin America and Asia Pacific for both outbound and inbound e-invoicing.

We meet requirements for integrity and authenticity of invoices by means of non-signed or signed EDI, PDFs (where accepted) as well as connection to government mandated portals for CTC processes covering both e-Invoicing and e-Reporting.

OpenText cloud-based e-Invoicing compliance solutions ensure you remain compliant with new and evolving mandates, simplifying the complexity of global e-Invoicing by providing:
- Content validation
- Digital signature
- Electronic archive
- Delivery to tax authorities
- Human readable invoice creation

### E-Invoicing Readiness Check service

Preparing for impending mandates means evaluating all your internal systems' data against the requirements of each country's unique e-Invoicing and e-Reporting mandates. Identifying gaps in critical data can take months and you risk being non-compliant, with associated financial penalties.

Our readiness check service allows you to rapidly verify your data to fast-track compliance.

Website: Visit us at www.opentext.com/solutions/e-invoice-management for more information
Also visit www.einvoicingbasics.co.uk for advice on e-invoicing adoption and implementation.
Contact: https://www.opentext.com/contact

### 7.21    OpusCapita

Headquarters:
OpusCapita Solutions
Bertel Jungin Aukio 3D
02600 Espoo
Finland

**OpusCapita**

| | |
|---|---|
| Countries with highest e-invoicing revenues | Finland, Sweden, Germany, Norway, Denmark, Netherlands. |
| Tax compliant e-invoice processing guaranteed for | Europe |
| Number of employees dedicated to e-invoicing and directly related offering | 150 |
| Number of customers | 1700 |
| Processed volume on own e-invoicing platform | 80+ million. |
| Core offering | E-invoice sending, E-invoice Receiving, EDI, Peppol, Invoice Automation, Procurement, Interoperability network. |
| Covered processes/messages along the supply chain | Order-to-Cash and Purchase-to-Pay. |
| Value-added services | Hybrid services (electronic and paper processing), digitizing, printing, invoice archiving, supplier onboarding, customer onboarding, Track & Trace. |
| Main target market segments | Large and mid-sized organizations. |
| Supported languages (with application/service) | English, Finnish, Swedish, German, Polish, Spanish, Italian, Portuguese, French. |
| Competitive differentiator | Value for money, flexibility and configurability of solutions, capability to resolve complex customer challenges, modern cloud EDI messaging platform, wide portfolio of solutions for Order-to-Cash and Purchase-to-Pay processes. |

**Embracing the future with OpusCapita**

**Your partner for seamless digital business**

OpusCapita specializes in providing **electronic invoice** and **supply chain document exchange**, **invoice automation**, and **procurement** solutions. Our cloud-based offerings empower businesses to streamline their processes, reducing costs while enhancing control and facilitating growth.

In recent years, we've made substantial investments in developing a new cloud-based EDI and e-invoicing messaging platform. This transformative shift marks a new era in how we handle Purchase-to-Pay and Order-to-Cash processes, positioning both us and our customers for a future of seamless, digital business communication. With nearly four decades of experience in the industry, we are dedicated to being your trusted partner for the future.

**7 reasons why to choose OpusCapita for your e-invoicing provider - ensuring e-invoice compliance**

**Ability to explain complex topics:** E-invoicing compliance can be daunting, but we're here to demystify it. Our experts excel at breaking down complex topics into digestible insights, empowering you to make informed decisions with confidence.

**Sharp focus:** At OpusCapita, e-invoicing compliance isn't just a part of what we do - it's at the core of everything. Our unwavering focus allows us to dedicate our resources and expertise solely to mastering the complexity of e-invoicing, guaranteeing unparalleled depth and proficiency in our services.

**Strong regionality:** Our deep understanding of nuances and regulatory frameworks, especially in Northern Europe empowers us to provide productized solutions that seamlessly integrate with your business operations across multiple countries. We speak the language of your region, ensuring compliance without compromise.

**Capability to solve customer problems:** Your challenges are our opportunities. Whether it's navigating regulatory complexities or overcoming technical hurdles, we thrive on solving problems and delivering tangible results that drive your business forward.

**In-house expertise:** While knowledge can be acquired, expertise is cultivated over time. At OpusCapita, our team of seasoned professionals boasts a wealth of experience in e-invoicing compliance. We invest in continuous learning and development to stay ahead of the curve, ensuring that our solutions are always at the forefront of innovation.



**Solution centricity:** We don't just offer products; we provide comprehensive solutions tailored to your unique needs. Our approach is rooted in understanding your business challenges and crafting bespoke solutions that address them with precision and efficacy.

**Supportability:** Building a robust support infrastructure is essential for sustained success. While support may be built, our commitment to your success is unwavering. We stand by you every step of the way, offering personalized support and guidance whenever you need it.

Website: www.opuscapita.com, https://opuscapita.com/references/
Contact: https://opuscapita.com/sales/

## 7.22    Pagero

Headquarters:

Pagero
Vastra Hamngatan 1
411 17 Gothenburg
Sweden

**PAGERO**

| | |
|---|---|
| Countries with highest e-invoicing revenues | Europe and Americas |
| Tax compliant e-invoice processing guaranteed for | AD, AR, AU, AT, BE, BR, BG, CA, CL, CO, CD, CR, HR, CY, CZ, DK, EC, EE, FI, FR, DE, GR, GT, HK, HU, IS, IN, IE, IM, IL, IT, JP, KE, LV, LI, LT, LU, MY, MT, MX, MC, NL, NZ, NO, PE, PL, PT, QA, RO, SM, SA, SG, SK, SI, ZA, ES, LK, SE, CH, TR, GB, AE, US, UY, VN |
| Number of employees dedicated to e-invoicing and directly related offering | 900+ |
| Registered users on own e-invoicing platform | Over 90,000 registered companies on a network reaching 14m+ businesses |
| Processed volume on own e-invoicing platform | 100+ million e-invoices per year, 500+ million other documents |
| Core offering | A Smart Business Network for: e-invoicing, e-invoicing & CTC compliance, AP Automation, AR, Automation, E-banking, Transportation Management, Tax Compliance, etc. |
| Covered processes/messages along the supply chain | 20+ message types in the Order-to-Cash and Purchase-to-Pay processes. |
| Value-added services | Data analytics, Invoice audit, Data Enrichment, Data Validation, Electronic Archive, Digital Signature, E-banking, Transportation Management, Compliance Centre of Excellence, Compliance Library, etc. |
| Main target market segments | Buyer/Supplier: Both<br>Industry: Agnostic<br>Geography: Agnostic<br>Company size: Medium to large |
| Supported languages (with application/service and customer support) | English, Spanish, Finnish, German, French, Swedish, Norwegian, Polish, Italian, Portuguese, Arabic. |
| Competitive differentiator | We are open: connecting you with you customers and suppliers regardless of their geography, size, systems or regulatory requirements |

## We make buying and selling easy

No matter where in the world you operate, Pagero's platform keeps you compliant with CTC and e-invoicing regulations, automatically.

By connecting to the Pagero Network, you will comply with both e-invoicing and continuous transaction control regulations in over 75 countries — plus reach millions of companies on hundreds of networks and platforms worldwide. Integrate seamlessly with your financial system or use Pagero's platform to receive real-time notifications about the status of your invoices, and much more.

"

*We have been able to fulfil our invoicing related tax requirements in all 29 countries where we use Pagero*

Mihai Chiriac, Manager of the EMEA & APJ e-invoicing program at

**Hewlett Packard** Enterprise

## Your e-invoicing & CTC compliance expert

Unlock the benefits of a world leading business network for compliant business transactions:

**Compliant**
Comply with local e-invoicing and tax regulations wherever you operate

**Global**
Reach all of your customers and suppliers with a single global platform

**Seamless**
Integrate with existing systems to continue operations uninterrupted

**Efficient**
Reach new heights of efficiency with a 100% digital process

## Industry-leading expertise at your disposal

We invest thousands of hours each year in regulatory analysis — so you don't have to. Pagero's Regulatory Affairs team is here to help you understand and achieve compliance within the unharmonized landscape of global e-invoicing.

- **Compliance Services**
  Benefit from having all compliance requirements embedded within your business processes.

- **Compliance Library**
  Access Pagero's extensive CTC database to assess your risks and plan your roadmap.

- **Centre of Excellence**
  Speak with Pagero's multi-lingual team of experts on e-invoicing and CTC compliance.

**One** connection

**Global** reach

**PAGERO**

www.pagero.com

## 7.23    Qvalia

Headquarters:
Qvalia AB
Hammarbybacken 27
Stockholm
Sweden

| | |
|---|---|
| Core offering | Full-service Peppol access point, automated line-item categorization, invoice validation, master data automation, and API integration. Offered as a SaaS solution for customers and partners. (Software-as-a-Service). |
| Covered processes/messages along the supply chain | End-to-end order-to-cash automation and reporting. |
| Value-added services | Peppol order management system, line-item spend analytics, report builder, B2B payment gateway, B2C internet bank e-invoicing, PDF scanning, and printing services. |
| Main target market segments | SMB, enterprise, and partners in all Peppol markets. |
| Supported languages | English, Swedish, and Finnish. New languages are added continuously. |
| Competitive differentiator | Superior transactional data management with line-item level control, cost-efficiency, and developer-friendly APIs. |

## QVALIA

**Qvalia is the business messaging platform. We help customers transform financial processes and gain superior control over every transaction.**

With Qvalia, users can manage, automate, and visualize their business transactions, accessing the most user-friendly and developer-oriented connection to **the Peppol network** and **EDI solutions**.

Our technology enables unmatched data control. Each business message is validated, line items are **automatically categorized**, and master data is continuously monitored and updated with the latest information from global business registries. This precision guarantees flawless transactions, accurate analytics, and unlocks efficient automation.

We are certified according to the **ISO 27001** security standard and have users in 30+ countries. The office is in Stockholm, Sweden.
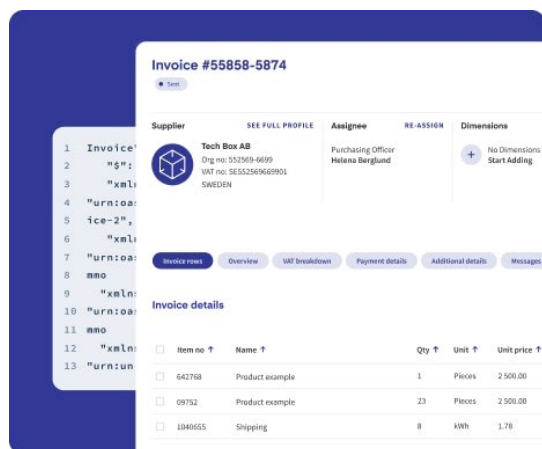


### SMB solutions
Small and mid-sized businesses get a full suite of online tools for daily work in accounts payable and receivable. Manage all messages, from e-invoices to e-orders, with ease. Features include:
- Create, send, and receive messages
- Simplified Peppol access
- Approval workflow

### Enterprise solutions
Large organizations gain full control of business message streams with developer-friendly APIs and advanced transaction logging dashboard. Features include:
- User and transaction logging dashboards
- Advanced analytics, incl. categorization
- Supplier onboarding

### Partner solutions
With our cost-efficient infrastructure, platforms, ERPs, and consultancies can provide enhanced business messaging at scale for any end-user. Features include:
- Full API and sandbox access
- Peppol access & VAN capabilities
- Dedicated support

Website: https://qvalia.com
Contact: sales@qvalia.com

### 7.24   RTC SUITE – All-in-One Cloud Platform for Tax Compliance

Headquarters:

RTC Technology Europe Limited
The View, Marina Village, Malahide, Dublin, K36 CX99, Ireland

| | |
|---|---|
| Countries with highest e-invoicing revenues | Austria, Belgium, Romania, Poland, France, Malaysia, Germany, Kingdom of Saudi Arabia |
| Tax compliant e-invoice processing guaranteed for | RTC ensures compliance with structured e-invoicing, e-Reporting, SAF-T, Reconciliation and VAT Return requirements in more than 40 countries. |
| Number of employees dedicated to e-invoicing and directly related offering | 50+ employees |
| Core offering | Seamless e-Invoicing e-Reporting processes, integrating effortlessly with any ERP, billing systems or IOT devices. Built on SAP BTP and empowered by AI, it harmonizes traditional compliance and e-compliance and provides insightful tax reports. RTC's unified cockpit consolidates all you need with its data-centric dashboard, allowing you to select countries and generate customized reports. |
| Covered processes/messages along the supply chain | e-Invoicing Compliance including account payable automation, (Clearance and Post Audit), e-Reporting, e-Waybill, e-Archive, VAT Reporting, VAT return, e-Reconciliation, e-Transportation |
| Value-added services | Data Reconciliation, ERP agnostic, Customizable & Globally scalable Launchpad, Swift Support, Short Implementation in 2 weeks, Multi-Lingual Support, GDPR Compliant, AI & ML, no extra SAP BTP license cost by being an exclusive SAP OEM partnership |
| Main target market segments | Multinational companies using ERP systems and their service providers, business & tax consultancy and technology companies as partners |
| Supported languages (with application/service and customer support) | English, German, French, Italian, Spanish, Portuguese, Arabic, Turkish |
| Competitive differentiator | • Effortlessly collate, analyze, and produce insightful tax reports, driving superior business results.<br>• Manage tax compliance globally via a single source platform.<br>• Ensure check & validation and error handling<br>• Extracts and converts transactional based raw data in real-time without requiring pre-formatting. |

## RTC SUITE – All-in-One Cloud Platform for Tax Compliance

### The Challenge

As tax rules keep changing and technology moves forward, companies have a big job: they need to keep up with new digital tax reporting rules and systems that check transactions automatically. These worldwide changes are meant to make tax systems clearer and work better. During these times of change, RTC Suite becomes a crucial help for companies trying to meet tax rules and run their business well.

### The Essence of RTC Suite

Tax environments are as varied as they are complex, posing unique challenges for compliance and reporting. RTC Suite reduces this complexity with a high-level, country-specific launchpad, blending global tax technology expertise with local insights.

### RTC Suite's Role in Tax Compliance & Commitment

RTC Suite stands at the forefront of tax technology, delivering dependable solutions that assist organizations in adapting to the changing landscape of tax and reporting obligations. As integration of tax technology becomes increasingly crucial, RTC Suite enhances your business's strategic and operational functions, drawing upon our depth of knowledge and broad experience to serve the tax professional community at large. Leading in tax compliance, providing a visionary, streamlined approach to handling global tax reforms.

### C Suite's Role in Tax Compliance & Commitment

RTC Suite stands at the forefront of tax technology, delivering dependable solutions that assist organizations in adapting to the changing landscape of tax and reporting obligations. integration of tax technology becomes increasingly crucial, RTC Suite enhances your business's strategic and operational functions, drawing upon our depth of knowledge and broad experience to serve the tax professional community at large. Leading in tax compliance, providing a visionary, streamlined approach to handling global tax reforms.

### Product Differentiation

• Seamless Integration: Built on SAP BTP, RTC suite connects with all ERPs like SAP, Microsoft Dynamics, and Oracle
• Advanced Technology: Uses AI for analytics and automated workflows.
• Global Compliance: Ensures compliance with tax regulations worldwide.
• User-Centric Design: Offers an intuitive interface for a smooth user experience.
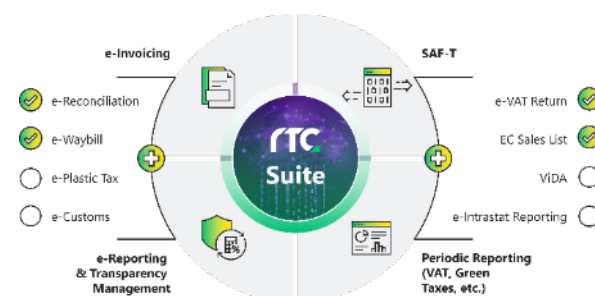


• Unique Data Management: Processes raw data in real time, no pre-formatting needed.
• Sustainability and Scalability: Adapts to ERP changes without major upgrades.
• Deployment Flexibility: Cloud and on-premise options to ease tax compliance.
• Unified Cockpit: A centralized dashboard for simplified report generation.
• Strategic Alliances: Partnerships that extend global reach and capabilities

Website: rtcsuite.com
Contact: Ridvan Yigit | +44 7833537388 | growth.team@rtcsuite.com

## 7.25   Sage

C23 5 & 6 Cobalt Park Way,
Cobalt Business Park,
Newcastle-Upon-Tyne,
Tyne & Wear,
NE28 9EJ, UK

| | |
|---|---|
| Countries with highest e-invoicing revenues | Global, wherever our customers transact |
| Number of employees dedicated to e-invoicing and directly related offering | 13,000+ |
| Registered users on own e-invoicing platform | Suppliers:    6mil+<br>Buyers:        6mil+ |
| Processed volume on own e-invoicing platform | Billion + invoices per year |
| Core offering | ERP, BMS, Payroll, HR solutions, e-invoicing, Accounts Payable Automation, Accounts Receivable Automation, Manufacturing, Carbon impact calculation, Cash Flow Forecasting, AI services, built in tax reporting |
| Covered processes/messages along the supply chain | Quotes, orders, pro-former / commercial invoices, tax invoices, delivery notes, remittance advice, payroll related messages, contractor reporting, employer reporting |
| Value-added services | Thriving ecosystem of partners that can provide asset and invoice finance, settlement services including payments out, payment acceptance, Sales & Use tax, Sales Tax Exemption Certificate Management, VAT automation, integration to accountants, cash flow analysis, logistic integration, eCommerce |
| Main target market segments | Small and Mid-Sized Businesses (SMBs) |
| Supported languages (with application/service and customer support) | English (Australia), English (US), English (UK), French (France), French (Canadian), German, Italian, Polish, Portugues, Simplified Chinese, Spanish |
| Competitive differentiator | Delivering connected accounting to enable smarter faster business software with embedded e-invoice, e-reporting and compliance |

**Sage Network**

## Unlocking the Potential of E-Invoicing

E-Invoicing heralds one of the most significant transformations in trade and accounting practices. This digital shift is an opportunity for every business to transact digitally with customers, suppliers, banks and communicate digitally at a granular level with regulatory bodies including tax authorities and environmental authorities. While this transition promises substantial cost savings, the scale and impact of the change has the potential to maximise so much more for businesses.

### Digital Transformation

The 'digital era' is an unparalleled opportunity for businesses to transform, optimise and automate their operations. Embracing e-invoicing and continuous transactions controls (also known as CTCs or e-reporting) not only reduces the cost of compliance but also unlocks a multitude of digitalisation benefits that go beyond regulatory adherence.

- **Seamless Integrations**: By connecting with any network, businesses can transact faster, facilitating agility and efficiency.
- **Real-time Business Insights**: Instant access to critical data enables informed decision-making, empowering organizations to adapt strategies and operations dynamically.
- **Cost Reduction**: E-Invoicing and CTC/e-reporting drastically reduce internal costs associated with accounts payable and receivable, driving operational efficiency, freeing resources to focus on more profitable activities and generating bottom-line savings.
- **Faster Payments**: Completing transaction digitally drive a well-documented effected of facilitating enhanced cash flow management, improving financial operations and liquidity.
- **Privacy and Security:** With a foundation built on 'privacy by design', digital platforms offer a secure environment, safeguarding sensitive information effectively against cyber threats.

By utilising the power of e-invoicing and CTCs, the Sage Network boosts productivity and time savings, enhances data accuracy by removing data entry and manual errors, and enables faster payments.

## Connected Accounting: Beyond Compliance

Sage believes e-invoicing presents a unique opportunity to redefine what it means for businesses to be connected in the digital age. E-Invoicing gives rise to the concept of Connected Accounting which transcends regulatory requirements and industry specialisms, enabling a holistic automation that prioritizes business needs. Designed with a focus on SMBs, Connected Accounting prioritize seamless integration between companies and operational efficiency, making compliance a by-product rather than a standalone endeavour.

Sage Network exemplifies our commitment to bringing this concept to life, by leveraging technology and automation to foster seamless, secure and intelligent business collaboration.

1. **Open and Integrated Network:** The Sage network supports diverse ERP systems, adapting to national standards and technological frameworks, from simple email communications to Peppol and other sophisticated multi-corner network models.
2. **Automation and Intelligence**: By embedding intelligence businesses can reduce late payments by 59% and administrative costs by 60%-80%. These improvements not only enhance efficiency but also fortify financial health and liquidity.
3. **Enhanced Compliance and Real-time Insights**: Sage believes that compliance is not just an obligation but a seamless output of business operations, providing real-time insights and enabling faster, more accurate decision-making and regulatory reporting.
4. **Built for SMBs**: Designed from the ground up with small to medium-sized businesses in mind, the Sage Network simplifies integration and compliance.

### Joining Forces with Technology Partners

We believe in the strength of collaboration. That is why Sage Network is an open network, Technology partners can connect their solution to create an expansive ecosystem.

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Website: www.sage.com
Contact: person: Adam Prince, VP of E-Invoicing and Compliance, adam.prince@sage.com

## 7.26    SAP

Headquarters:
SAP SE
Dietmar-Hopp-Allee 16
69190 Walldorf, Germany

| | |
|---|---|
| Tax compliant e-invoice processing guaranteed for | Over 35 countries: AT, AU, BE, BR, CH, CL, CN, CO, DE, DK, EG, ES, FI, FR, HU, ID, IE, IN, IT, JP, KR, KSA, LU, MX, MY, NL, NO, NZ, PE, PL, PT, RO, RS, SE, SG, SK, TH, TR, TW. Additional upcoming regulations planned. Broader tax compliance requirements covered in over 55 countries. |
| Registered users on own e-invoicing platform | More than 3.000 customers, including many Fortune 100 companies, are using SAP Document and Reporting Compliance for e-invoicing and tax compliance worldwide. |
| Processed volume on own e-invoicing platform | More than a billion invoices per year. |
| Core offering | SAP Document and Reporting Compliance |
| Covered processes/messages along the supply chain | Full trade cycle Order-Invoice-Payment and e-reporting to authorities. SAP Document and Reporting Compliance enables automated electronic documents (B2G, B2B and B2C invoices, transports, payments, etc.), reporting and audit files to fulfil local compliance and streamline the transition to continuous transaction controls, including automated verification of consistency with authorities' portals and handling of returns auto-populated by authorities. |
| Value-added services | Regulatory relief as a service powered by AI to revolutionise how to keep up with legal changes: identify, understand, and implement to achieve and maintain compliance. SAP implementation services. 24 x 7 maintenance and support. |
| Main target market segments | Global large and medium enterprises of any industry who use SAP and non-SAP solutions. |
| Supported languages (with application/service and customer support) | Over 30 languages. |
| Competitive differentiator | SAP Document and Reporting Compliance embeds compliance in the business processes (ERP, SAP Business Network, SAP Concur solutions), providing end-to-end integration from master data to downstream processes such as payments and tax returns auto-populated by authorities. Only SAP provides this as a native solution within the system of record, without data replication or lengthy reconciliations. It offers localization-as-a-self-service to scale one process and one solution to any compliance scenario worldwide. |

**Unlocking Global Success with SAP: Let Automation and Standardization Revolutionize Compliance**

As the market leader in enterprise application software, SAP runs with the motto of bringing out the best in every business.  SAP is helping companies of all sizes and in all industries run better by redefining ERP and creating networks of intelligent enterprises that provide transparency, resiliency, and sustainability across supply chains.

SAP software delivers a global-ready, local experience, and enables compliance with countries' local regulations by connecting core end-to-end business processes. As a result, global and local processes are integrated, leading to a sustainable business outcome everywhere, with geographic coverage over 100 countries.

"
*We saw digital compliance as an opportunity to optimize operational performance and resource management. SAP Document and Reporting Compliance exceeds expectations by streamlining our response to increasing regulations that differ by country.*
Aldo Magenes, Corporate IT Director, Sun Chemical Corporation

**SAP Document and Reporting Compliance: Comply efficiently worldwide**

Rapid digitalization is increasing the number of global tax regulations around the world.
In addition, authorities are starting to involve themselves in the business transactions, disrupting well established business processes and taking controls of the invoicing flow between suppliers and buyers. As a result, they have all the data they require to prevent tax evasion and start auditing taxpayers automatically or even auto-populating tax returns moving toward tax bills.
SAP Document and Reporting Compliance can help businesses overcome these challenges and fulfil local compliance mandates by creating a scalable foundation to respond to emerging regulations without putting business continuity at risk. One solution standardized worldwide to increase transparency and auditability, improve operational agility to implement legal mandates and maximize compliance at minimum costs.
SAP Document and Reporting Compliance automatically generates electronic documents, such as electronic invoices, in the local format required and transmits them to the

appropriate authority or business partner upon creation. With a centralized cockpit powered by workflows, the latest document status can be easily reviewed across countries. This helps to address failures more quickly and set the base for further automations powered by SAP Business AI. Electronic documents, authorities' responses and corrections are all seamlessly managed within the system of record, creating the traceability required to support tax audits.
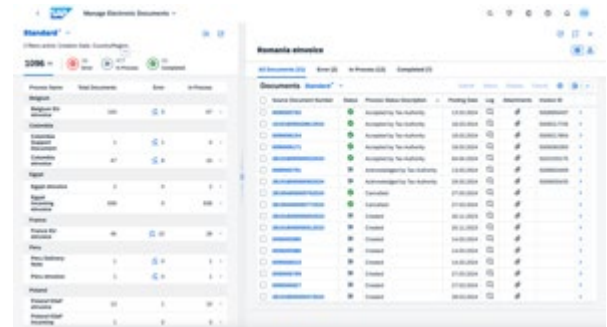


After the real-time exchange of electronic invoices, SAP Document and Reporting Compliance enables businesses to continuously verify completeness and consistency between the records in the ERP and the ones in the authorities' portals. Tax experts no longer need to trade-off risks and effort: all records are reconciled without any manual intervention and users are prompted with any inconsistency that needs their attention. Always-on processes throughout the month prevent workload peaks and unnecessary stress close to compliance deadlines.
At period end, SAP Document and Reporting Compliance automatically prepares the required statutory reports in the legal format expected by the authorities. Tax experts can make traceable adjustments with capabilities that drill down to the underlying business documents and gain more audit-proof documentation. And, in case of tax returns auto-populated by tax authorities, draft data can be retrieved, reconciled to the data in the system of record, updated and digitally signed. With transparency on tax deadlines as well as approvals and automated submission to the authorities, the solution helps you reduce the risk of noncompliance.

Website: https://www.sap.com/products/financial-management/document-reporting-compliance.html
Contact us at https://community.sap.com/topics/document-reporting-compliance

**7.27    SNI Technology (SNI)**



Headquarters:

SNI Technology
YTU Teknopark C1 Blok No:403 Esenler
Istanbul
Turkey

| | |
|---|---|
| Countries with highest e-invoicing revenues | Turkey, EU countries, middle east, Asia |
| Tax compliant e-invoice processing guaranteed for | 30+ countries (EU, Middle East, Asia) |
| Number of employees dedicated to e-invoicing and directly related offering | +100 |
| Registered users on own e-invoicing platform | Customers: 550+ |
| Processed volume on own e-invoicing platform | 9.4 million e-invoices per year |
| Core offering | SNI provides global e-invoicing, e-invoice reporting and SAF-T & VAT reporting solutions for SAP and other ERPs, both on-prem, cloud or hybrid. |
| Covered processes/messages along the supply chain | Dispatch (e-waybill, e-transport, etc) - e-Invoice (B2B, B2C, B2G) Reconciliation, and electronic reporting (SAF-T, VAT Reprots, etc) to authorities. |
| Value-added services | We offer e-invoice integration, VAT automation, easy e-invoice monitoring, and compliance reporting (e-invoicing, e-invoice reporting, SAF-T) to digitize processes for on-prem, cloud, and hybrid solutions for SAP and all ERPs. |
| Main target market segments | Large and Very Large Entities in any industry. Balanced offering for mid-sized organizations |
| Supported languages (with application/service and customer support) | English, Turkish |
| Competitive differentiator | We offer an end-to-end single package in the most crucial steps, becoming your sole vendor throughout the entire process. We ensure scalable solutions that include strong support for regulatory updates, even for global accounts. |

## SNI TECHNOLOGY PROFILE

Established in 2006, SNI boasts 100+ employees across Europe, offering end-to-end tax technology provider solutions to 750+ clients, with 85% being multinational. Our solutions are globally utilized, providing versatile implementation options for efficiency.

SNI safeguards businesses against risks of tax compliance while digitization transforms the tax system functions around the world. We provide end to end solutions, implemented either on-premise, through the cloud, or as a hybrid. The service we give includes the implementation and long-term support including regulatory updates for an existing function. We are helping them to save time, cut costs, and reduce risk.

**Solution Overview:**

**Simplicity**: SNI streamlines the extraction of invoice data by formatting it as files according to mandatory file formats (XML, JSON, etc.). Progress can be tracked via SNI's eInvoice Cockpit. The verified data is sent to tax authorities via an SNI Connector and forwarded to business partners after successful verification.

**Reliability**: SNI add-ons are SAP-certified for seamless operation across most versions, eliminating the need for system upgrades. Easily integrated solutions are optimized for existing systems. SNI has over a decade of expertise supporting various ERPs.

**Efficiency**: SNI's end-to-end e-invoicing solution offers global flexibility, is available on-premise, through the cloud, or in a hybrid model, and is easily scalable for efficiency.

In the e-invoicing model, invoice information is directly transmitted to tax authorities for validation before reaching the recipient. Files are expressed using XML and contain all invoice details.

Businesses extract relevant invoice data, format it as XML files, submit them to tax authorities for assessment, and once validated, transmit them to recipients. With real-time e-invoicing, data is sent to the government immediately after preparation. Automation reduces administrative burdens for users of SNI Solutions. SNI e-invoicing and real-time e-invoicing solutions meet reporting requirements for each invoice. This obligation currently applies in approximately 20 countries worldwide.



Website: www.snitechnology.net
Contact: +90 212 909 1664 / contact@snitechnology.net

## 7.28   Sovos

Headquarters:

Sovos Compliance
200 Ballardvale St 4th floor
Wilmington, MA 01887
United States

**SOVOS**

| | |
|---|---|
| Countries with highest e-invoicing revenues | |
| Tax compliant e-invoice processing guaranteed for | Sovos provides post audit and CTC e-invoicing in more than 65 countries across North America, EMEA and LATAM. |
| Processed volume on own e-invoicing platform | **Sovos processes over 11 billion** compliant invoices per year through our Compliance Network, more than **60 times** other industry providers. |
| Core offering: Global E-Invoicing Solution | Sovos Compliance Cloud, a unified platform for global tax compliance and regulatory reporting Sovos' e-invoice compliance solution ensures businesses won't have to worry about incorrect data holding up compliance processes. Sovos' electronic invoicing software makes it possible to keep up with ever-changing international tax requirements so you're always compliant no matter where you do business. |
| Covered processes/messages along the supply chain | |
| Value-added services | |
| Main target market segments | Multinational corporations across the globe, primarily in manufacturing, retail, financial services, digital services, insurance and new economies. |
| Supported languages (with application/service and customer support) | English, Spanish, German, Portuguese, French, Turkish |
| Competitive differentiator | Sovos provides the only complete solution that allows businesses **identify, determine, and report** on every tax transaction and obligation globally. |

## SOVOS

### The Journey to Always-On Compliance

CFOs and CTOs know that compliance is core to their tech-driven growth agendas, impacting everything from transaction processing to data management to customer and vendor insights.

Tax compliance technology - encompassing tax, regulatory, and trust – helps eliminate the obvious risk of audits or penalties, but also does much more: it is a vital resource for reducing operational complexities, accelerating speed-to-market, and providing access to important business intelligence.

Today, companies that want to grow must make compliance central to their strategic planning.

### Compliance in an Always-On Era: Sudden, Relentless & Consequential Changes

Digital transformation has fundamentally changed how governments and tax authorities around the world implement and enforce tax and compliance obligations. With systems increasingly built for real-time and transparent exchanges of information, governments now demand greater and faster access to transactional data.

Why? Tax gaps, the amount owed less the amount collected, now total in the billions. As a result, governments have embraced technology to decrease fraud, increase revenue capture and assess taxable positions.

Through capabilities such as continuous transaction controls (CTCs), tax authorities can now view a company's activity data in real time. Over 80 countries have adopted e–invoicing mandates, a number expected to grow rapidly.

There are also increasing levels of cooperation between governments. In the EU, VAT in the Digital Age (ViDA) proposes collective technology use as fundamental to VAT reforms aimed at adding tax revenue and spurring economic growth.

### A Strategic Imperative

As businesses grapple with the demands of new regulations and accompanying technology implications, they have largely responded by purchasing point-based solutions that solve the immediate deadline in front of them, often in one department and for one region. In other words, they are playing defense.

While it may address a singular obligation in the moment, over time, this approach leads to detrimental effects. An overreliance on point solutions strains resources across the enterprise, from IT services to the CFO office.

Even as 82% of companies already believe they are more exposed to tax compliance risk than they were five years ago (source: Bloomberg Tax), and 90% expect their compliance costs to keep increasing (source: Accenture), many continue to invest in disconnected technology, data and teams.

Point solutions are fragmented, don't easily communicate with one another, and can't scale when mandates change. What is intended to solve an immediate need to meet a mandate or tax obligation, instead creates two larger business challenges:

• Increased risk: As tax and compliance changes happen, the ability to keep up is more difficult when you have multiple solutions, team, and processes to manage and update.

• Higher costs: While each point solution investment may not be significant, the overall cost of adding new and replacing outdated technologies adds up.

As companies struggle to gather, organize, and categorize their data to meet requirements, they also miss the opportunity for predictive insights.

This is why Sovos launched the Sovos Compliance Cloud. The industry's first and only complete platform for tax compliance and regulatory reporting. Learn how Sovos can work with you to ensure compliance anywhere you do business.

Website: www.sovos.com

## 7.29    SPS Commerce

Headquarters:

SPS Commerce, Inc.
333 South Seventh Street, Suite 1000
Minneapolis, MN 55402
United States of America

| | |
|---|---|
| Countries with highest e-invoicing revenues | Netherlands, Germany, France, Belgium, UK |
| Tax compliant e-invoice processing guaranteed for | SPS Commerce ensures compliance with e-invoicing, real-time reporting, and legal archiving requirements in 30+ countries. We are a certified Peppol Access Point and are continuously expanding our geographical coverage. |
| Number of employees dedicated to e-invoicing and directly related offering | 100+ |
| Registered users on own e-invoicing platform | Suppliers:    1,000,000+ Connections<br>Buyers:        3,500+ |
| Processed volume on own e-invoicing platform | 40 million e-invoices per year |
| Core offering | Full-service e-invoicing and supply chain solutions. |
| Covered processes/messages along the supply chain | Beyond e-invoicing, SPS Commerce supports the full spectrum of supply chain processes, including orders, acknowledgments, and shipping notices. We handle all essential documents needed by retailers, manufacturers, logistics firms, and third-party logistics providers (3PLs) to operate smoothly and efficiently. |
| Value-added services | Document content validation and enrichment, e-archiving, analytics, fully managed onboarding, order receipt and processing, item data automation, inventory service, shipment and carrier services, e-commerce services and marketplace connections, 24/7 support, and more. |
| Main target market segments | Mid-market to enterprise-level buyers and suppliers in national and international trade benefit from our specialized solutions, catering to the unique needs of retailers, manufacturers, distributors, logistics companies, and 3PLs across a wide range of industries. |
| Supported languages (with application/service and customer support) | English, Dutch, French, and German, with an additional 30+ languages supported by our e-invoicing platform. |
| Competitive differentiator | SPS Commerce stands out as a true full-service provider for supply chain and e-invoicing solutions. We follow a business-first approach, offering tailored solution recommendations that address our customers' unique business challenges so they can focus on what they do best. |

## SPS COMMERCE IS ELEVATING THE GLOBAL STANDARD WITH E-INVOICING

### HIGHLIGHTS

The global marketplace is alive with trade, and more brands of every size are doing business with buyers on the other side of the world. But despite the lift in international commerce, regulatory and tech disruptions can put businesses on the back foot as they navigate individual requirements by country.

E-invoicing has emerged as a global response to the fractured nature of international account management. Its digital-first nature and ability to help businesses generate, deliver, and manage invoices has helped e-invoicing become a standard among some governments and regulatory bodies.

E-invoicing has been at the center of the conversation around the ViDA proposal for the EU flat tax, which promises to reroute the flow of invoice data to tax authorities for reduction of losses due to VAT fraud and increase in the efficiency of VAT processes.

Implementation has traditionally been a pain point for business seeking to integrate e-invoicing options into their business. These struggles range from a lack of knowledge about individual nations' regulatory requirements to the sheer technical complexity of configuring a system meant to work across borders.

The benefits outweigh the challenges, as e-invoicing represents the potential for considerable savings in cost, time, manual effort. It can also improve your cash flow management, improve your relationships with trading partners and enhance your compliance capabilities.

Production can be severely bottlenecked when teams are forced to contend with international invoices without an e-invoicing solution. The complexity of international law and trade regulations has potential repercussions for Legal, Compliance, IT, Finance, and Supply Chain teams.

An e-invoicing system would not only alleviate these challenges, it gives teams more latitude to work on growing the business. Automation, built-in connections, and streamlined compliance can give teams the bandwidth to operate at a higher level.

SPS Commerce offers the most robust e-invoicing solution available, supported by a team of experts that work around the clock to make your business more successful. Without the combination of people, process and tech offered by SPS Commerce, other e-invoicing solutions might not be able to meet the demands of your business.

There's more to SPS Commerce than e-invoicing. SPS offers full-service solutions to help you handle every link in your supply chain and save you time. SPS knows where retail is headed, because they're guiding the journey.
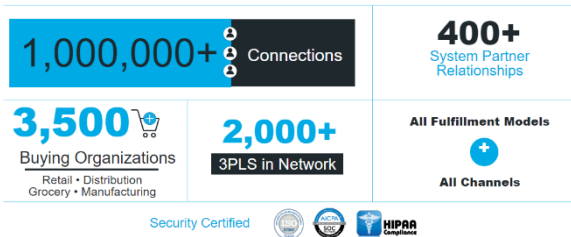


Website: www.spscommerce.com
Contact: The E-invoicing Team, +31-88-369-8000, marketing-europe@spscommerce.com

## 7.30   SupplyOn

Headquarters:

SupplyOn AG
Ludwigstr. 49
85399 Hallbergmoos
Germany

| | |
|---|---|
| Countries with highest e-invoicing revenues | EU and Asia |
| Tax compliant e-invoice processing guaranteed for | DE, FR, GB, ES, US, CZ, IT, CH, NL, BE, RO, AT, IE, SG, CA, SE, DK, HU, PL, FI, HK, AU, ZA, PT, IN, SK, CN, LU, AE, MY, MX |
| Number of employees dedicated to e-invoicing and directly related offering | Over 20 employees |
| Registered users on own e-invoicing platform | Suppliers:  over 12000 users<br>Buyers:  18 companies |
| Processed volume on own e-invoicing platform | Approx. 2,2 million per year |
| Core offering | From order to invoice as Software as a Service (SaaS) via a joint global network |
| Covered processes/messages along the supply chain | Source-to-contract, purchase-to-pay, invoicing, procurement incl. catalogue management and auctions, supply chain performance management & analytics, supplier management, quality and transport management, ESG |
| Value-added services | Quality assurance of invoices through extensive checks, support of a wide variety of message formats (XML, EDI, WebEDI, CSV, PDF, etc.) |
| Main target market segments | Companies of any size in the automotive, aerospace, railway and manufacturing industries |
| Supported languages (with application/service and customer support) | English, German, French, Portuguese, Spanish, Italian, Mandarin, Japanese, Korean, Czech, Hungarian |
| Competitive differentiator | SupplyOn focuses on the entire process chain and electronically maps not only the invoice but the entire Purchase-to-Pay process. The invoice is clearly linked to the preceding documents (e.g. order) - with all changes in the order process - thus enabling fully automatic booking. |

**SupplyOn creates electronic invoice consistently from the order onwards**

Many providers of e-invoicing solutions focus on the pure invoicing process rather than on the entire process from ordering to invoicing. In contrast to this, SupplyOn pursues a holistic approach and consistently thinks the invoicing process from the point of order - which offers numerous advantages over conventional e-invoicing solutions and the highest potential for cost savings.

SupplyOn solves the problem of inconsistencies and poor data quality in invoices and establishes a clear reference to the effective order - with all relevant changes in the order process.

With SupplyOn, the invoice is generated consistently from the data of the entire preceding processes and automatically checked against it: The data is updated and enriched during order processing - for example, information from the preceding documents order, order confirmation, shipping notification and goods receipt. In the end, valid and correct data forms the basis for invoicing.



Integrated process from the purchase order to the invoice
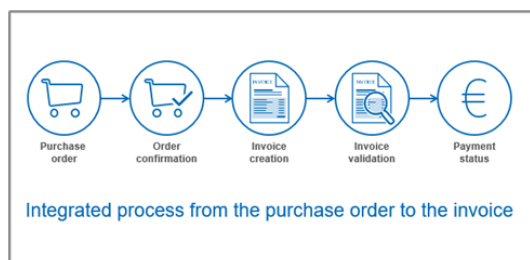
This has significant merits over conventional electronic invoices: On the one hand, this ensures that the invoice is clearly linked to the order - which simplifies and accelerates invoice verification through automatic booking. On the other hand, the invoicing process is also simplified for the supplier, since the entire ordering and delivery process enriches data in the system that is then available and preset during invoicing. In addition, the supplier receives transparency about his open invoices and about their status.

Besides the business validations, SupplyOn also performs country specific legal checks on each invoice. This helps suppliers creating legal compliant invoices and prevents unnecessary costs due to formal errors. Suppliers can rely on country specific checks based on 31 country rules. On top, SupplyOn also provide dedicated invoicing add-ons for CTC / Clearance countries.

This includes, for example, the golden tax process which is mandatory in China and supports legally compliant invoicing in cooperation with the Chinese IT service provider Aisino. Additional Clearance countries are Italy, Mexico, India, etc. Based on the strategic roadmap, future countries will be added to the list once they introduce their Clearance mandate. These include France, Spain and Germany. Due to the high flexibility and configurability of the application, special tax requirements of other countries can be implemented quickly.

SupplyOn offers not only a very convenient function for billing products but also for billing services after transparently recording the gradual provision of the services.

**The global supplier network makes SupplyOn Invoicing unique**

SupplyOn connects more than 140,000 companies worldwide via one single platform. With these companies, the Purchase-to-Pay process, including invoicing, can be implemented in the shortest possible time to quickly benefit from substantial savings in process and purchasing costs.

Website: www.SupplyOn.com
Contact: Ludwig Jahrstorfer, Ludwig.jahrstorfer@supplyon.com, +49.811.99997-372

### 7.31 Swisscom (Schweiz) AG - Conextrade

Headquarters:

Swisscom (Schweiz) AG - Conextrade
Pfingstweidstrasse 51
8005 Zurich
Switzerland

| | |
|---|---|
| Countries with highest e-invoicing revenues | CH, DE, AT, FR, UK, SE, ES |
| Tax compliant e-invoice processing guaranteed for | AD,AU,AT,BE,BG,CA,CR,HR,CY,CZ,DK EE,FI,FR,DE,GR,HK,HU,IS,IN,IE,IM IL,IT,JP,LV,LI,LT,LU,MY,MT,MC,ME MA,NL,NZ,NO,OM,PL,PT,QA,RO,SA,SG SK,SI,ZA,ES,SE,CH,AE,GB,US,XI,BR CL,CO,EC,IN,IT,MX,PE,KR,TR,UY |
| Number of employees dedicated to e-invoicing and directly related offering | >30 |
| Registered users on own e-invoicing platform | Suppliers: >10'000 Buyers: >500 Consumers: >1'000'000 |
| Processed volume on own e-invoicing platform | >100'000'000 |
| Core offering | EDI, EDI-Routing ,E-Invoicing International, Web-EDI, Invoice Workflow, Spend Management, credit card, Payment, eBill, E-Invoicing PDF, OCR, IDP, Archive, PEPPOL, Ariba, e.g. e-invoicing Network Service, Payment Service Provider, Tax compliance, electronic marketplace SaaS (Software as a Service), Software |
| Covered processes/messages along the supply chain | Procure2Pay & Order2Cash: Invoice, Order, Order Response, Delivery note as well as other processes e.g. sales report inventory report, remittance advice etc. |
| Value-added services | - |
| Main target market segments | Large suppliers in any industry Balanced offering for suppliers and buyers in mid-sized organizations |
| Supported languages (with application/service and customer support) | German, French, English, Italian |
| Competitive differentiator | revolutionized spend management with AI-driven automation and multi-channel e-invoicing, enabling seamless integration and unmatched efficiency for businesses |

In the rapidly evolving digital landscape, Conextrade stands out as a beacon of innovation and reliability. Established in 2000 as a wholly owned subsidiary of Swisscom, Conextrade has become the cornerstone for national and international clients seeking digitized procurement and invoice processing solutions.

Who We Are:

At our core, we are a seasoned team of 30 professionals, bolstered by more than 23 years of experience in the digital space. As one of the Swiss market's premier B2B platform, Conextrade is renowned for custom-tailored solutions that drive Procure2Pay and Order2Cash processes. We are not just a provider but a partner, serving as the General Contractor in our clients' projects, managing all services from a single point of contact and ensuring the transition into digital front-runners in their respective industries.

What We Do:

Our offerings are at the cutting edge of technology, including AI, machine learning, deep learning, and natural language processing. Conextrade automates spend management and converges various aspects of the Purchase2Pay process into a unified platform. This approach grants our clients full transparency and control over their expenditures, fostering efficiency and cost savings. Our unique multichannel invoice receipt with AI-supported processing accelerates monthly closures, automates invoice validation, and synchronizes spending data in real-time via secure channels or API integrations.

What Sets Us Apart:

The Conextrade advantage lies in our Swiss-made solutions, custom-designed for each client, and our capability to maintain close relationships with other Swisscom Business Units, ensuring business continuity and trust. Our integration flexibility allows us to scan and extract critical invoice data, conduct automatic matching, and manage any discrepancies, all while seamlessly connecting with clients' ERP systems for compliant and timely payments.

Our Commitment to Innovation:

We are at the forefront of pioneering advancements, empowering our clients to seize the myriad opportunities presented by the digital revolution. Our initiatives are laser-focused on unlocking digital leadership potential, ensuring our clients are primed to excel in an increasingly interconnected and digital-first world.

As an integral part of a premier IT provider, we are fully equipped to navigate the evolving demands of the digital economy. Our emphasis on enhancing expenditure management enables businesses not only to realize cost savings but also to leverage their resources more effectively and streamline their business processes for optimal performance and growth.

In essence, Conextrade represents more than a service; we embody a strategic ally in the digital transformation journey, continuously engaged, curious, and ready to tackle the challenges of tomorrow.

Website: www.conextrade.com
Contact: Conextrade, +41 848 860 200, customercare.conextrade@swisscom.com

## 7.32　TELEMA

**Telema**

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|---|---|
| Headquarters: | |
| Telema AS<br>Kristiina 15<br>Tallinn<br>Estonia | |
| Countries with highest e-invoicing revenues | Estonia, Latvia, Lithuania |
| Tax compliant e-invoice processing guaranteed for | Europe |
| Number of employees dedicated to e-invoicing and directly related offering | 35 |
| Registered users on own e-invoicing platform | Suppliers:　1500<br>Buyers:　　5500 |
| Processed volume on own e-invoicing platform | 25 million e-documents per year |
| Core offering | EDI service (Telema EDISupplier, Telema EDIBuyer)<br>AP automation (Telema eFlow, Telema MatchFlow) |
| Covered processes/messages along the supply chain | Orders, invoices, despatch advices, receipt advices, sales and inventory reports, 3PL messages, etc, altogether 30+ message types |
| Value-added services | Vendor Managed Inventory (Telema VMI),<br>Sales Force Automation (Telema SFA),<br>Product Data Sync (Telema PDS) |
| Main target market segments | For EDI: FMCG suppliers and retailers<br>For AP Automation: any SMEs |
| Supported languages (with application/service and customer support) | English, Estonian, Latvian, Lithuanian |
| Competitive differentiator | Offering the best customer experience via the most reliable service (SLA 99.99%) in the Baltic States |
| | www.telema.com, eflow.live |

**7.33   TRAFFIQX®**

Headquarters:

TRAFFIQX® (powered by b4value.net
GmbH)
Trippstadter Straße 122
67663 Kaiserslautern
Germany

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|---|---|
| Countries with highest e-invoicing revenues | Europe |
| Tax compliant e-invoice processing guaranteed for | Major European Countries |
| Number of employees dedicated to e-invoicing and directly related offering | Approx. 400 TRAFFIQX® - wide |
| Registered users on own e-invoicing platform | More than 120,000 registered TRAFFIQX® members. More than 1.8 million digital participants. More than 10 million business partners reachable. |
| Processed volume on own e-invoicing platform | More than 80.000.000 p.a. |
| Core offering | Platform for digital document and data exchange. Network of networks for business process communication. |
| Covered processes/messages along the supply chain | Highly secure multichannel document & data exchange network for B2B, B2G and B2C. |
| Value-added services | Interoperability & Roaming Services, Hybrid Services (electronic and paper processing), Signature Services, Archiving Services, B2G Interop Connections, Peppol Access Point, Scan and Data Capture Services, intl. Print and Mail Services. Networking and Onboarding Services. |
| Main target market segments | TRAFFIQX® providers specialize in different customer groups and cover everything from small and medium-sized businesses to large international corporations. |
| Supported languages (with application/service and customer support) | German, English, French, Italian, Dutch |
| Competitive differentiator | TRAFFIQX® is the leading platform for multichannel document and data exchange and business process communication. The TRAFFIQX® Providers connect companies and institutions with their business partners. |

## TRAFFIQX® (powered by b4 technology)



TRAFFIQX® is the name of the network of networks, which is an association of various complementary companies that act as providers in the network. The technology used by the providers is the same technology produced by b4value.net GmbH. These providers are: Bundesdruckerei, DATEV, RICOH, SGH, Quadient, Asterion, BeCloud and b4value.net.

Digitization is the topic of our time. Digitization of processes between customers and suppliers is teamwork. Millions of companies and institutions with different framework conditions need to be connected. In order to make the benefits of digitalization available to everyone, close cooperation and synergies between all process participants is required. The player in the TRAFFIQX network are as followed:



### TRAFFIQX® Member
As a TRAFFIQX® Member, you have 20,000 ways to easily connect to TRAFFIQX services. You, your customers and your suppliers benefit directly from multi-channel document and data exchange. Automated processes help you and your business partners save time, money and resources.

### TRAFFIQX® Provider
TRAFFIQX® Providers use our proven, out-of-the-box platform technology to establish themselves and their services in the fast-growing business process communication market. They create digital connections between customers and suppliers. Directly or through interoperability with other

platforms and value-added services. TRAFFIQX® the network of networks offers everything an independent provider needs for electronic document and data exchange.

### TRAFFIQX® Multiplier
TRAFFIQX® Multipliers use the platform of a TRAFFIQX® Provider to promote and distribute digitalization in their market or community. As a digitization partner for their customers, they benefit from recurring revenues and network effects. They also generate new customers.

### TRAFFIQX® Expert
TRAFFIQX® Experts complement the product portfolio of TRAFFIQX® Providers with their value-added services. Additional services such as eSignatures, Print and Mail Services, Scan and Data Capture Services or Financial Services can be used by the TRAFFIQX® member on demand. This makes the TRAFFIQX® platform a marketplace for directly usable expert services.

### TRAFFIQX® API
TRAFFIQX® API Partners are software manufacturers who connect their software directly to the TRAFFIQX® platform via an Application Programming Interface (API). This gives software users easy, secure and fully integrated access to the services of the TRAFFIQX® providers. Each customer decides for themselves which provider is the right one for their needs.

### TRAFFIQX® Interop
TRAFFIQX® Interoperability Partners are market companions who, like us, are committed to the digitalization of business processes. The technical, organizational and procedural interaction with these partners is regulated in such a way that the TRAFFIQX® member can reach many millions of companies and institutions digitally today and many more in the future. Interoperability is the driving force behind global digitization.

**Become part of the TRAFFIQX® network**
Choose your role and become part of the TRAFFIQX® network. Contact us on: https://www.traffiqx.net/en/contact

Website: https://www.traffiqx.net/
Contact: Justin Seidel, justin.seidel@b4value.net

## 7.34    Unifiedpost Group

Headquarters:

Unifiedpost Group SA
Av. Reine Astrid 92A
1310 La Hulpe
Belgium

| | |
|---|---|
| Tax compliant e-invoice processing guaranteed for | AD, AE, AR, AT, AU, BE, BG, CA, CH, CL, CO, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HK, HR, HU, IE, IL, IN, IS, IT, JP, LI, LT, LU, LV, MA, MC, ME, MT, MX, MY, NL, NO, NZ, OM, PE, PH, PL, PT, QA, RO, RS, SA, SE, SG, SI, SK, TR, US, ZA. |
| Number of employees dedicated to e-invoicing and directly related offering | 1160+ |
| Registered users on own e-invoicing platform | Suppliers:      3,900,000<br>Buyers:         1,700,000 |
| Processed volume on own e-invoicing platform | For 2022, we processed 512,000,000 million invoices. |
| Core offering | E-invoicing, e-payments, e-identity and e-reporting. |
| Covered processes/messages along the supply chain | Full digitalisation of the entire financial supply chain and e-invoicing/e-reporting compliance in over 60 countries. |
| Value-added services | Payment services, identity services, tax validation, invoice financing, electronic signatures, AP automation, AR automation, digital archive, automated real-time VAT reporting. |
| Main target market segments | Governments for national e-invoicing and continuous transaction control (CTC) platforms that support different governments modules. Plus, large corporations in any industry. Balanced offering for suppliers and buyers in mid-sized organisations. |
| Supported languages (with application/service and customer support) | EN, AL, BG, CA, HR, CS, DA, NL, ET, FR, DE, EL, HU, IT, LV, LT, NO, PL, PT, RO, RU, SR, SK, SL, ES. |
| Competitive differentiator | Our strategy centers on the so-called "compliance triangle" where we integrate e-invoicing, e-reporting, e-payments and e-identity services into a single, user-friendly platform. Apart from our commercial e-invoicing solution, an important pillar in our strategy is the national e-invoicing and continuous transaction control (CTC) platforms, developed to support governments and different government e-invoicing models, integrating automated real-time VAT reporting modules. |

## Unifiedpost Group's government e-invoicing solution

After the successful implementation of an electronic invoicing solution for the governments of Estonia and Serbia, Unifiedpost Group has been recognised as an important player in the government e-invoicing sector.

**eFaktura World** is a national e-invoicing and continuous transaction control (CTC) platform, developed to support governments and different government e-invoicing models: Real-time reporting, Clearance, Centralised exchange, Decentralised CTC and exchange (including Peppol infrastructure). The solution itself is already in production and has been running live in Serbia since April 2022 as a centralised government platform for B2B and B2G e-invoicing mandates and real-time VAT reporting.

### eFaktura World - Key Attributes and Characteristics

The solution's main attributes are: **Availability, Security, Scalability, Adaptability, Modularity** and it is built with the following characteristics:

· **Multi-component software** system, with independent and reusable components.
· **Configurable solution**, system components could be turned on and off around the core system, which will allow adaptation to any model for automated tax reporting and invoicing.
· **Allows implementation and customisation** of elements that are country-specific, with local best practices.
· Will **attain fiscal objectives** for capturing invoice data in the tax platform with the support of certified service providers operating on a decentralised basis.
· Possibility to be **deployed in multiple jurisdictions** and to support indirect tax controls for domestic, cross-border and multi-country operations.

### eFaktura World – Architecture and Modules

Microservice architecture, based on EN-16931-1 invoicing semantic model, with mapping to UBL structural model. Main modules are the following: **Core invoice exchange, automated VAT reporting module**, **fraud detection**, **notification centre, back office, logs and audit, document storage, database.**

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### *Why Unifiedpost Group?*

Our mission is to help governments worldwide implement e-invoicing mandates and to switch to automated real-time VAT reporting. Our current experience, know-how and competence, position us as a reliable and trusted partner for government solutions.

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**Our offering:**
· **Ready to deploy solution** - Available, Secure, Scalable, Adaptable, Modular.
· Thoroughly tested and **proven in practice solution** currently operating, with proven know-how.
· **Experience in production** of government e-invoicing systems and architecture models that allow integrations with already operating government systems.
· **Customisation,** improvement and upgrade - adaptations to constant up to date regulations and standards.
· **Fast and secure software implementation** – strong project management, based on software development methodologies and reliable partner integrations.
· **Consultancy on legal and tax regulations** – company know-how, cooperation with local governments, financial and accountancy consultancy companies and IT partners.
· General experience and development of **solutions within the government sector.**
· International experience in developing **commercial e-invoicing** solutions and ecosystems.
· **Competence center** and experienced development team.
· Maintenance and **support 24/7** availability and monitoring.
· Backup and **disaster recovery plan**.
· Supporting **documentation**.
· **Marketing and communication** support.

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## 7.35   xSuite

Headquarters:

xSuite Group GmbH
Hamburger Straße 12
22926 Ahrensburg
Germany

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|---|---|
| Tax compliant invoice processing guaranteed for | EUROPE, ASIA |
| Number of employees dedicated to e-invoicing and<br>directly related offering | 240 |
| Number of users of our localization solution | About 1,800 P2P customers with approx. 300,000 users |
| Processed volume with own e-invoicing solution | 64 million e-invoices per year |
| Core offering | Accounts payable invoice automation solutions (APIA) for the SAP market with strong expertise in the areas of e-invoicing, AI in invoice processing and holistic P2P processes. All solutions are suitable for every SAP S/4HANA operating model. |
| Covered processes/messages along the supply chain | The whole procure-to-pay workflow from requisitioning to the receipt and processing of purchase order confirmations, delivery notes and invoices. For digital integration of suppliers, xSuite offers a business partner portal. |
| Value-added services | Expert process consulting, project coordination and software implementation, training, support, and managed services. |
| Main target market segments | Leading companies worldwide in any industry, as well as public clients. |
| Supported languages (with application/service and customer support) | German, Englisch, French, Dutch, Danish |
| Competitive differentiator | End-to-end solutions, designed for any SAP deployment model. Sending and receiving of e-invoice via network, portal or e-mail, easy integration, cloud-based technology, supports EU standards (XRechnung, ZUGFeRD as well as numerous international XML formats), ideally suited for SAP S/4HANA and SAP ERP. |

## Global Player for Accounts Payable Invoice Automation and P2P Processes with SAP

### Standardized, digital solutions for simple, secure, and fast work

xSuite Group is among the leading software manufacturers of intelligent applications automating document-based business processes. We serve organizations across the globe with our expertise in workflows for accounts payable in SAP (including e-invoicing) and provide all our services and software components from a single source. More than 300,000 users at leading companies worldwide, as well as for public clients use our solutions to process over 80 million documents each year.

### Cloud and hybrid

xSuite solutions optimize processes in the cloud, on premises, and in hybrid settings. They cover the whole purchase-to-pay workflow from requisitioning to the receipt and processing of order confirmations, delivery notes and invoices. For digital integration of suppliers, we offer a business partner portal.

### Technology and services

The entire digital workflow is based on latest technology and contains the components necessary for document capture, workflow, and audit-proof archiving, with all the advantages of targeted AI functions for optimal usability. In addition to expert process consulting, project coordination and software implementation, we offer training, support, and managed services.

### On SAP Journey with xSuite

When it comes to SAP certification, we keep all our customers in mind, whether they use ECC systems or have switched to SAP S/4HANA. Our solutions optimize processes independent of operating model, in all environments, certified for SAP NetWeaver (ECC systems), SAP S/4HANA, and SAP S/4HANA Cloud.

### Ready for the future of accounts payable invoice automation

Machine-readable structured records is where invoicing is headed in the future. This format will replace paper and PDF invoices over the medium term.

The solution "xSuite eDNA" (**e**lectronic **D**ocument **N**etwork **A**dapter) gets you in perfect shape for e-invoicing requirements. The solution acts as your cloud-based input and output hub for e-invoices and conveniently integrates with your ERP system via APIs. The software also enables you to convert invoices into a wide range of e-invoice formats and to transmit data via several e-Invoice networks, e.g. Peppol or SDI. This means that all your e-invoice requirements are covered: from creation and transmission through to processing.
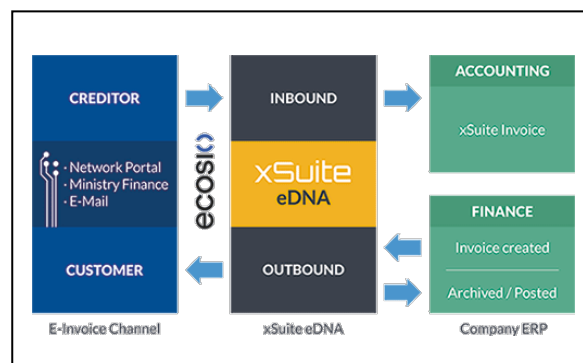


xSuite eDNA (electronic Document Network Adapter)

### Facts

Founded in 1994 and headquartered in Ahrensburg, Germany, we have 240 employees working at eight xSuite locations around the world (in Europe, Asia, and the United States). The company is ISO 27001 certified.

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# 8. Appendix

## 8.1 Glossary

Throughout this report, several critical concepts are consistently mentioned. To ensure clarity and avoid any confusion, the definitions provided herein apply to these concepts.

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| **AR** | Accounts Receivable are monies owed to a supplier by its customers arising in the normal course of business from the delivery of goods and services. They are usually represented by outstanding invoices. |
| **AP** | Accounts Payable are monies owed by a customer to its suppliers arising in the normal course of business from the delivery of goods and services. They are usually represented by outstanding invoices. |
| **Artificial Intelligence, AI** | Broader concept of machines being able to carry out tasks associated with humans around learning and problem solving. It has the cognitive ability to look for and learn on certain patterns and to take appropriate actions. |
| **B2B Invoices** | In this report includes all tax compliant invoices to corporate as well as to the public sector; B2B & B2G/G2B |
| **Bill** | Includes all categories of bills sent to consumers (B2C/G2C) |
| **Continuous Transaction Controls (CTC) models** | Under this framework, organizations are mandated to report invoices to tax authorities or, at the least, furnish key invoice details electronically. The concept includes different models such as Real-time Reporting, Clearance, Centralised Exchange and Decentralised CTC and Exchange. |
| **DPO** | An efficiency ratio that measures the average number of days a company takes to pay its suppliers. |
| **DSO** | The days sales outstanding is a calculation used by a company to estimate their average collection period. |
| **E-billing** | E-billing covers in this report the electronic bills from Business-to-Consumers (B2C). Some market participants use this term alternatively for the process on issuer side in general, regardless if the customer is an enterprise or household. |
| **EBPP** | Electronic Bill Presentment and Payment; focus in B2C; this acronym is more popular outside Europe |
| **EIPP** | Electronic Invoice Presentment and Payment; focus in B2B/B2G; this acronym is more popular outside Europe |
| **E-invoicing** | Electronic invoicing is the sending, receipt and storage of invoices in electronic format without the use of paper-based invoices as tax originals. Scanning incoming paper invoices or exchanging electronic invoice messages in parallel to paper-based originals is not electronic invoicing. |
| **Integrated Digital Trade (IDT)** | Integrated Digital Trade, transcending previous definitions such as Financial Supply Chain, EDI, Order-to-Cash, Procure-to-Pay, and Business Automation. This segment represents a holistic approach to digitally facilitated trade, including financial, procurement and e-reporting processes. |
| **Internet of Things, IoT** | Infrastructure of the information society. The inter-networking of physical devices, vehicles (also referred to as 'connected devices' and 'smart devices'), buildings, and other items - embedded with electronics, software, sensors, actuators, and network connectivity that enable these objects to collect and exchange data. |
| **Invoice** | Includes in this report all categories of invoices: B2B, B2C, B2G, G2B |
| **Issuer** | Invoice issuer, supplier, biller |

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|---|---|
| **Network operator** | Service provider respectively operator with any-to-any model; an invoice issuer or recipient needs just one interface for achieving any other counterparty in the same network; In some countries, the terms 'operator', 'service provider', 'consolidator' or 'supplier network' are more common. |
| **Order-to-Cash** | Is the business process for receiving and processing customer sales. It follows the sales opportunity, order, delivery, invoice and payment, and covers both business-to-business (B2B) and business-to-consumer (B2C) transactions. |
| **P2P** | Is the process and supporting systems that automate the purchase-to-payment chain of activities, connecting procurement and invoicing operations through an intertwined business flow that automates the process from identification of a need, planning and budgeting, through to procurement and payment. |
| **PO** | Purchase Order |
| **POS and mobile invoicing** | Point of Sale invoicing; on a classical payment receipt, the included information is limited and the customer is normally not identified; if however, the customer is identified and considered in the content of the resulting confirmation document, the former payment receipt is upgraded to a classical invoice that can automatically be processed. The same is valid for purchases via mobile devices, e.g. train and flight tickets. |
| **Procure-to-Pay** | Buyer perspective for the processes of selecting vendors, establishing payment terms, strategic vetting, selection, the negotiation of contracts, actual purchasing of goods, order, delivery, invoicing and payment. |
| **Purchase-to-Pay** | Buyer perspective for the processes order, delivery, invoicing and payment. Purchasing is a subset of procurement. |
| **SCF** | Supply Chain Finance is defined as the use of financing and risk mitigation practices and techniques to optimize the management of the working capital and liquidity invested in supply chain processes and transactions. SCF is typically applied to open account trade and is triggered by supply chain events. Visibility of underlying trade flows by the finance provider(s) is a necessary component of such financing arrangements, which can be enabled by a technology platform. |
| **SME** | Small and Medium sized Enterprise |
| **Recipient** | Buyer, Customer; The individual or organization that will receive the invoice |

## 8.2    Sources

| Ref | Document and/or hyperlink |
|---|---|
| [1] | European Commission, EMCS: How It Works, https://taxation-customs.ec.europa.eu/emcs-how-it-works_en, 2019 |
| [2] | http://www.brasil-id.org.br |
| [3] | Republic of Kazakhstan, Bidding Document |
| [4] | European Commission, VAT Gap report 2023 |
| [5] | El Diario, Facturación electronica, un cambio imminente |
| [6] | Expert group (A. Kollmann, B. Koch, C. Bryant, C. van der Valk, N. Paradivskyy, R. van Hilten): A next generation model for electronic tax reporting and invoicing, 2022 |
| [7] | European Commission: https://taxation-customs.ec.europa.eu/taxation-1/value-added-tax-vat/vat-digital-age_en |
| [8] | Bain: Embedded Finance: What It Takes to Prosper in the New Value Chain |
| [9] | https://www.onlineinvoices.com/blog/2022/06/02/late-invoice-payments/ |
| [10] | Allied Market Research: World Supply Chain Finance Report 2022 |
| [11] | https://late.directory/payments/increase-of-late-invoice-payments/ |

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| Ref | Document and/or hyperlink |
| --- | --- |
| [12] | GENA (formerly EESPA): e-Invoicing & Invoice Finance: opportunities for cooperation |
| [13] | Report of the Australian Business Registrar |
| [14] | Atradius Payment Practices Barometer 2023 |
| [15] | BCG Global Payments Report September 2023 |
| [16] | McKinsey Global Payments Report September 2023 |
| [17] | InsiderIntelligence.com |
| [18] | Committee on Payments and Market Infrastructures (CPMI) 2021 |
| [19] | GENA (formerly EESPA): Opportunities in Payment services for e-Invoicing service providers |
| [20] | Eurostat, Enterprises having received orders online (at least 1%) |
| [21] | University of Oxford, The future of employment: how susceptible are jobs to computerisation? https://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf |
| [22] | London School of Economics, Nine likely scenarios arising from the growing use of software robots, http://eprints.lse.ac.uk/64032/1/blogs.lse.ac.uk-Nine%20likely%20scenarios%20arising%20from%20the%20growing%20use%20of%20robots.pdf |
| [23] | Menon, R.: Bitcoin ETFs: The gateway to mainstream crypto adoption - The Economic Times, 2024 |
| [24] | European Commission: Sandbox Project - EBSI -. https://ec.europa.eu/digital-building-blocks/sites/display/EBSI/Sandbox+Project, 2024 |
| [25] | Schipp, G.: safeFBDC. Neue Risikomanagement- und Finanzierungsinstrumente für komplexe Lieferketten und 'smarte' Wertschöpfungsnetzwerke der Industrie 4.0. https://safefbdc.com/index.php/use-cases-safefbdc/, 2023 |
| [26] | Statista: DeFi - Worldwide. https://www.statista.com/outlook/fmo/digital-assets/defi/worldwide, 2024 |
| [27] | Schär, F.: Decentralized Finance: On Blockchain- and Smart Contract-Based Financial Markets, 2021 |
| [28] | http://www.ecyclegroup.com/recycling-facts.aspx#:~:text=Approximately%201.3%20billion%20inkjet%20cartridges,percent%20are%20currently%20being%20recycled.) |
| [29] | Ardent Partners: https://payablesplace.ardentpartners.com/2019/01/monday-first-thing-safeguarding-environment-einvoicing-epayments/ |
| [30] | Report by the United Nations Economic Commission for Africa: https://www.uneca.org/sites/default/files/chapterimages/era2019_eng_Chapter_3.pdf |
| [31] | VATCalc: https://www.vatcalc.com/pakistan/pakistan-readies-centralised-e-invoicing-and-fiscal-systems/ |