



# WHITE PAPER

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Transforming supplier invoice processing  
into a competitive advantage

*Innovation at the heart of financial processes*



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## EXECUTIVE SUMMARY

*Supplier invoice processing is much more than just an accounting issue. It represents a cost center, a source of disputes, and the subject of countless constraining regulatory changes. A key process for any organisation, invoice processing not only has an impact on competitiveness and cash flow, but it also affects the image reflected by finance departments with respect to their internal and external partners. Digitalisation takes on these challenges as a lever for transformation in the digital age. Originally offered with on-premises platforms for companies to deploy internally, or through services externalised via Business Process Outsourcing (BPO), solutions have evolved progressively toward the Cloud as a means to target companies of more modest size. However, none of these approaches has proven entirely satisfactory. Today, only a new-generation solution can meet the needs of every organisation with maximum performance and agility, regardless of their structure, size, or invoice volume.*

*Streamline for Invoices embodies this vision. It is a precursor for a new generation of solutions that not only leverage the intrinsic benefits of the Cloud, but also take advantage of using innovative services deployed on a highly customizable platform. As a bonus, it also provides unique benefits that enable CFOs to gain operational efficiency rapidly and claim their rightful role as key players in the digital transformation of their organisations.*



# THE KEY ISSUES OF DIGITALISATION

In this era of digital transformation, automating invoice processing is no longer just an option. It is a necessity. Because of their multi-functional nature, invoices are truly at the heart of many exchanges within any company. As the media for accounting entries and exchanges between buyers and sellers, invoices also materialize commercial transactions and serve as justification documents for collecting and deducting VAT. Invoices are accessed, copied, shared, and transferred, involving many processes and impacting the productivity of many departments, even affecting a company's global efficiency.

In a world that grows more digital every day, there is no more time to waste on data entry, delays caused by the circulation of paper, lack of visibility, or the many errors and cases of fraud resulting from a poorly controlled process. All companies, large and small, are confronted by these recurring problems.

Supplier invoice digitalisation propels companies toward greater productivity and operational efficiency, while also providing the key benefit of improving their image significantly. It is also synonymous with concrete benefits.

## GENERATING SIGNIFICANT SAVINGS

Digitalising supplier invoices is a fast and effective source for savings. On average, five copies of every invoice are made so that various departments can process the information as needed. This incurs many costs, such as for paper, envelopes, stamps, ink and electricity for the photocopier, printing, and scanning, as well as physical storage space to hold all the documents. With digitalisation, those costs disappear. The result is that the average cost of processing an invoice in electronic format is only £7, compared to an average of £14-16 for paper format<sup>1</sup>. In other words, with a volume of 30,000 invoices per year, a company would see over £200,000 in savings. Suffice to say that ROI for digitalisation is easy to calculate.

## REDUCING PROCESSING TIMES

Because of many factors, such as reception, data entry, approvals, matching, allocation, payment, dispute management, and archiving, nearly 25% of all invoices are paid late<sup>2</sup>. Long processes involving paper circulation between departments often leads to lost documents and errors. Even when the cycle functions correctly, a paper invoice takes 10 to 15 days to process, while an invoice in a digitalised process only takes three days. Those payment delays can be a source of friction between clients and suppliers, incurring non-trivial costs in terms of professional image. Delays can also lead to penalties or even fines. Throughout the world, many governments have now introduced legislation specifically targeting this area of business interaction.

## OPTIMISING PRODUCTIVITY

Working with documents in electronic format makes it possible to communicate faster internally and with suppliers. Accessing information has become an obligation of fundamental importance in a changing world where companies are dispersed geographically around the globe, and employees are continually more mobile. Available instantly with a simple tap or click when you are connected, wherever you may be, digitalised invoices also help improve productivity. Centralized on a single platform able to handle all invoice formats and adapt to the specific requirements of every supplier, processes are automated and thus controlled more tightly. That means processes are smoother. From their perspective, companies gain better visibility, optimise their monitoring of current operations, and can even increase margins through finer cash management. Employees no longer have to waste their time on tasks with little added value, or searching for documents in archives. Collaboration and communication occur more naturally on a company-wide scale, regardless of the geographical location of the people involved with processes. Companies essentially become more competitive.

1. E-Invoicing/E-Billing, Digitisation and Automation Billentis 2016  
[https://www.economie.gouv.fr/files/presentation\\_fe2017\\_entreprises\\_v20150915\\_0.pdf](https://www.economie.gouv.fr/files/presentation_fe2017_entreprises_v20150915_0.pdf)

2. Challenges ahead for buyers making late payments - procurement news  
<https://www.procurious.com/procurement-news/challenges-buyers-late-payments>



## **DERIVING VALUE FROM INFORMATION, OPTIMISING PERFORMANCE**

In an era of Big Data, where society considers knowledge as the fuel of tomorrow, who could rightly ignore the existence of a potential gold mine of information? Nonetheless, that is exactly what most companies do when they stick to their invoice processing in paper format. Adopting digitalisation is the way for them to extract huge quantities of information regarding invoice processes. In turn, that information can be used to feed analytical databases automatically so companies can use knowledge to intelligently optimise processes, eliminate bottlenecks, optimise purchasing, and more generally identify action levers to optimise their operations.

## **SECURING PROCESSES**

Digitalising supplier invoices also gives companies a way to keep track of all transactions, secure data, and fight against fraud more effectively at the same time. Standardized, automated processes ensure traceability for all processing in a reliable audit

trail. Process digitalisation also makes it possible to implement automated processing to foresee or detect different fraud scenarios. Companies can perform statistical analyses on invoice amounts, such as unusual amounts for a given supplier, or using Benford's law of distribution, to identify suspicious transactions or implement processes to avoid internal fraud by formally separating sensitive tasks (known as "Segregation of Duties").

## **DEVELOPING RESPONSIBLE POLICY**

In addition to their operational effectiveness, digitalised processes represent a significant contribution to environmental protection, with less paper consumed, less mail shipped, and even less ink used. A vector for economic growth, digitalisation is also a relevant response to sustainable development issues. It fits naturally into a Corporate Social Responsibility (CSR) approach, where efforts to reduce paper use and carbon footprints contribute to a company's good reputation more than ever.

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## AN OPPORTUNITY FOR CFOs

The CFO's role is central to all the issues mentioned here, with CFOs today being much more than simple money managers. They are the keepers of financial stability whose job now reaches deep into the company's global performance. In that context, the question is not whether CFOs have a role to play in digital transformation, but how they can support the effort as a relay from upper management, alongside the IT department and the company's professional activities. What better way to provide proof of their abilities than to focus on their own operational efficiency? Digitalising the supplier invoice process is an opportunity for CFOs to reinforce their credibility by performing digital transformation within their own department.



# OVERCOMING THE LIMITS OF CURRENT SOLUTIONS

While half of all CFOs consider that digitalizing supplier invoices is one of their top priorities<sup>3</sup>, many still hesitate due to the barriers it raises, notably regarding time, cost, and complexity. After periods with "everything custom on-premises<sup>4</sup>," followed by "everything standard on the Cloud," a new generation of solutions brings together the best of both worlds to offer companies options that are simultaneously custom, fast to implement, more efficient, and far less costly, regardless of company size and the number of invoices involved.

## HANDLING DIFFERENT INVOICE FORMATS

When it comes to invoices, digitalising outgoing flows – issued invoices – is relatively fast and easy to implement. On the other hand, managing incoming flows – received invoices – is far more complex and requires taking into account all the different possible types of invoices, considering the company's aspects, determining who does what, and implementing adapted workflows. The first challenge consists of handling all types invoices within a single process. Globally, three main invoice reception channels can be distinguished.

1. Receiving invoices in paper format. Even if the number of invoices received in paper format will decrease progressively over time, driven by regulatory changes, companies today still receive a large proportion of their invoices on paper. According to various sources and studies, the total percentage is between 80% and 88% of all incoming invoices. The challenge is to scan those invoices as early in the process as possible to handle them electronically. If the goal is to drastically limit manual data entry, it is essential to implement effective automatic document reading (ADR) technologies to automatically extract invoice data from scanned images.

2. Receiving invoices in a format that is already electronic, such as PDF files, eliminates scanning steps. Those types of invoices are generally sent by e-mail or loaded onto a portal. In that case, ADR processing is also required to extract relevant invoice data from PDF images automatically. When invoices are received by e-mail, it is also recommended to automate the extraction of file attachments and control documents to avoid creating a new set of tasks with low added value.
3. Another format used for document capture, likely the most efficient option when many invoices are received from a given supplier, is called EDI – Electronic Document Interchange – which uses structured data files such as EDI, XML, and CSV. These formats no longer require automatic document reading. Invoice data can be used directly from the received files. There are two main types of EDI. Fiscal EDI, which meets the technical requirements imposed by tax administrations, where invoice authenticity is ensured by cross-checking archived data for both the sender and receiver. Conventional EDI, which does not meet the above technical constraints, and requires the implementation of a reliable audit trail.

Whereas specific actions relating to the reception of each invoice format are needed, the underlying invoice automation process must be identical. On the other hand, every company has its own specific organisational aspects, which implies that every invoice management process is actually unique. Lastly, in a world that has taken an unwavering turn toward digital, the technologies, practices, organisational methods, and regulations continue to change rapidly. For those reasons, when the time comes to make a choice, it is essential to pick a solution that offers high performance and is customizable, as well as flexible and agile, to make the investment worthwhile over the long run.

## ON-PREMISES SOLUTIONS TOO CUMBERSOME FOR DEPLOYMENT

For many years, software solutions for automating invoice processing were reserved for large companies and organisations. Though complicated to master, these solutions were generally based on effective

3. Priorités 2018 du Directeur Financier. Oser la transformation, PWC France <https://www.pwc.fr/fr/assets/files/pdf/2017/12/priorites-2018-du-directeur-financier.pdf>

4. On-premise: a software solution deployed and maintained on servers operated by the organisation itself.

technologies deployed internally. The effort involved laborious integration projects, significant technical resources for operations, and regular updates to benefit from new features. These types of solutions are still used today, offering a high level of customization that enables organisations to integrate all of their specific needs relatively easily. However, the implementation costs were such that only companies managing very high volumes of invoices could justify the investment.

## **SOLUTIONS NOT ALWAYS UP TO EXPECTATIONS**

It is true that ADR technologies are very powerful. On the other hand, users do not always enjoy identical benefits, which generates both frustration and disappointment. How is that possible? What causes disparities in automation success rates? The best reading engines leverage machine learning technologies, but their efficiency relies on two main factors: The rigor with which learning is handled by organisations, and the quality of information present in their supplier database. It is worth noting that, regarding this latter point, not all companies are not on equal footing. Maintaining performance through the paper document capture and reading processes requires real investment, often for relatively technical tasks that are not within the core skill sets of the companies using those processes.

It is essential to keep up the performance of incoming document processing: when the automation rate rises from 50% to 83%, team productivity increases by a factor of three, that is, three times more invoices processed per employee. Some companies continually measure reading rates and spend time to adjust reading engines and clean their supplier databases. Others work hard at the beginning of their project and then let the platform run for months or years with declining reading rates. Achieving the best possible reading rates for the long-term, without wasting effort on configuration, is discussed later in this document.

## **CLOUD OFFERINGS STILL TOO LIMITED**

The emergence of the Cloud has profoundly changed the software market. Solutions available in "Software as a Service" mode – SaaS – can be implemented quickly,

do not require any infrastructure investment, and favor better control and visibility regarding true costs. Thanks to the Cloud, invoice automation is now finally within reach of SMEs and employees who do not manage sufficiently high volumes of invoices to justify internal deployment. Nonetheless, some companies are starting to see the limits of Cloud solutions that were perhaps chosen too quickly. It is very important to remain vigilant regarding the capacity of Cloud offerings to adapt to organisational specifics and future evolutions. Most solutions available via the Cloud offer standard features and workflows that cover simple and nominal cases. Driven by the need to meet the requirements of as many companies as possible, these solutions are generally limited in functional terms, allowing relatively little personalization and a limited upgrade path.

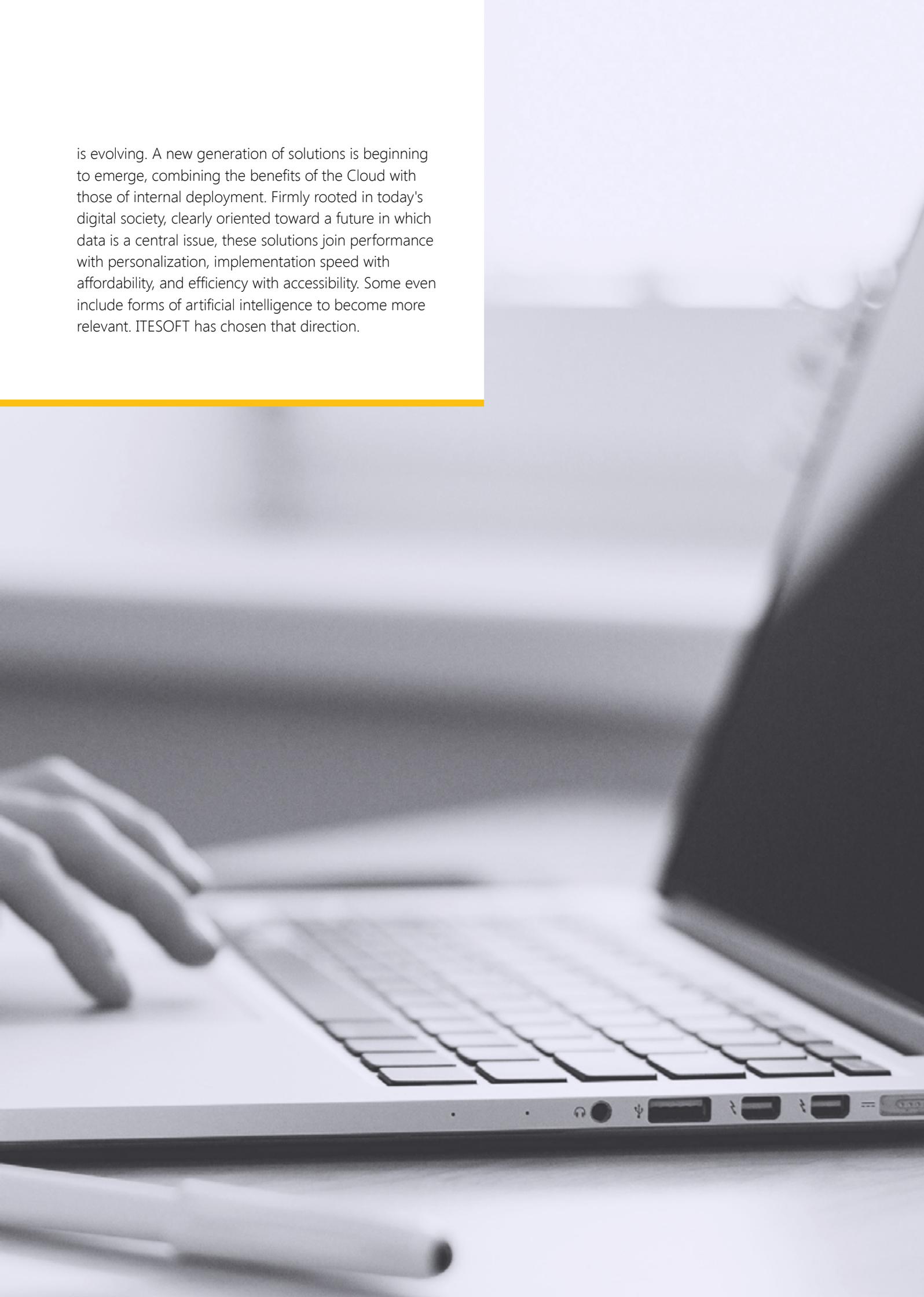
## **BPO SERVICES OVERWHELMED**

Facing Cloud offerings with limited functionality and internal solutions that are too costly, some organisations prefer to externalize their invoice handling via Business Process Outsourcing (BPO). With a desire to make the problem go away, they entrust their entire invoice digitalisation process to outside service providers. By handling high volumes of invoices, these providers can pool and implement ADR technologies and mobilize the resources needed for data correction tasks at a low cost. While the concept is far from being new, inherited from long-standing IT outsourcing approaches to externalize entire corporate functions, it does have some downsides. For example, fees may seem attractive compared to the costs of data entry by company employees, the service provider is really the one that benefits from productivity brought by ADR technologies. The lack of integration with information systems prevents companies from reusing controls already present in their ERP packages, which generates further errors and manual reprocessing when importing data back into local accounting systems. Unfortunately, the cost of managing these errors is huge. Even worse, this approach limits visibility over processes by disrupting the audit trail.

## **TOWARD A NEW GENERATION OF SOLUTIONS**

Given the relatively unsatisfactory nature of these three options, the digitalisation market for supplier invoices

is evolving. A new generation of solutions is beginning to emerge, combining the benefits of the Cloud with those of internal deployment. Firmly rooted in today's digital society, clearly oriented toward a future in which data is a central issue, these solutions join performance with personalization, implementation speed with affordability, and efficiency with accessibility. Some even include forms of artificial intelligence to become more relevant. ITESOFT has chosen that direction.



# ITESOFT: A FIRMLY INNOVATIVE APPROACH

A pioneer in document digitalisation, ITESOFT has been working with organisations of all types for over 30 years, implementing evermore innovative technologies and business expertise. Continuing along that path, the company embraced the Cloud wave while avoiding the pitfalls. Streamline for Invoices, the ITESOFT solution for managing supplier invoices, is based on a modern technical architecture that fully benefits from the Cloud business model, flexibility and ease of implementation, as well its agile implementation possibilities. The solution does, however, remain highly customizable, adapting to the uses and pace of progression of each company. In other words, by combining the best technology has to offer, with unique business expertise, Streamline for Invoices gives CFOs all the economic and functional flexibility they need to optimise their operational efficiency and take an active part in their organisation's digital transformation. This is a disruptive solution with unique benefits.

## RAPID DEPLOYMENT WITH AN AGILE APPROACH

Developed with the insight gained from 30 years of experience in the digitalisation field, and with consideration for hundreds of projects implemented for clients in widely varying contexts, ITESOFT benefits from unique business expertise in supplier invoice processing. To get started quickly, the solution leverages a set of generic processes optimised to meet the needs of most companies. Unlike with other solutions, these processes can be fully customized and adapted to each company's organisational and operational needs through agile project management.

## RECONCILING CLOUD WITH CUSTOMIZATION

ITESOFT wanted to create a Cloud offering without functional limitations as compared to available on-premises solutions. Even if client needs expressed at the outset are sometimes quite simple, ITESOFT has learned from experience that most companies end up adding unanticipated customization requirements. Taking this experience into account, Streamline for Invoices was developed on an extremely agile technology



foundation that enables unprecedented levels of customization for a Cloud-based solution. Streamline for Invoices is a flexible and open solution that adapts to all usage scenarios, with unique architecture that leverages a Digital Business Platform appreciated by the world's leading analyst firms, combined with a micro-service structure.

### **CAAS (CAPTURE AS A SERVICE) FOR GREATER PRODUCTIVITY WITHOUT ANY CONFIGURATION EFFORT**

When invoices are not provided in a structured EDI format, the data contained in the invoices must be extracted automatically from scanned images or received in electronic format directly. Organisations that deal with high volumes of invoices have been using automatic document reading (ADR) technologies for many years, but reading success rates vary greatly from one implementation to another. One cause is typically the poor quality of supplier databases, and the need train people with the technical skills to monitor reading rates over time and adjust reading engines if necessary.

Capture as a Service – CaaS – is a disruptive Cloud service that leverages shared supplier databases that are both complete and of high quality. The reading engine components are directly controlled by ITESOFT's top experts, to the common benefit of all clients. Those experts continually monitor reading rates and make the necessary adjustments to maintain performance. Using a shared supplier database of 600,000 companies, and optimising platform performance on an ongoing basis, results are spectacular: an automation rate of over 85%\* is kept up over time without any configuration effort at all.

Companies using this solution can therefore delegate this task with relatively low added value and focus their energy more productively on business, processes, and data analysis. For some companies, image editing tasks no longer even require dedicated teams, and accounting staff can move directly on to enriching invoice data.

### **SYNCHRONOUS CONNECTORS FOR 100% AUTOMATION**

Most Cloud solutions offer some kind of ERP integration through file exchange procedures. An asynchronous method, this integration is relatively easy to implement but it does not take into account controls already in the ERP system. This results in many errors when importing invoices into the ERP system and the only option is to process them manually. To reduce the amount of errors with a solution based on file exchange, all of the controls existing in the ERP system would have to be rewritten, which is not always an option. This problem is resolved by using a synchronous connector that calls existing ERP controls directly, which entirely eliminates invoice errors and makes it possible to achieve 100% automation – Straight-through Processing – for a large majority of invoices.

### **TRACEABILITY AT EVERY LEVEL**

A reliable audit trail has become an absolute requirement for all invoice processes other than those that are secured using a qualified electronic signature and EDI. Most companies manage hybrid circuits comprised of paper, scanned, and natively digital workflows. They are therefore all impacted by the requirement for an audit trail, which implies implementing a set of controls to reliable traceability between received invoices and the related provision of goods and services. By leveraging its Digital Business Platform, in particular the Business Process Management (BPM) component, Streamline for Invoices naturally generates a reliable audit trail from invoice reception to payment in the ERP system.

\*Average field extraction rate measured in September 2017 on a production platform, based on a sample of 952,000 invoices.

## **FROM THE AUDIT TRAIL TO FRAUD DETECTION**

While there are many benefits to be derived from process digitalisation, it is also a source for new risks related to fraud. False invoices are one of the classic examples of fraud perpetrated by companies. For example, they may be used to solicit undue VAT reimbursements (which explains why tax authorities require three invoice security measures), and are implicated in various money embezzlement schemes. Beyond the traditional controls required as part of a reliable audit trail, additional controls must be implemented if a company really wants to limit the cases of fraud related to invoice processing. Fraud detection modules in Streamline for Invoices enable organisations to implement a wide range of automatic controls based on invoice data, internal and reference databases, and advanced data analysis algorithms. In addition, Streamline for Invoices is built with an open architecture with which complementary processes can be added to secure database modification and reporting in case of fraud.

## **ANALYZING AND STEERING PERFORMANCE**

Digitalisation generates very large volumes of raw data that organisations need to be able to analyze in a simple manner to effectively steer their supplier invoices process automation. Whether monitoring payment terms, identifying the number of invoices pending approval, or the invoice amount per supplier, users want to be able to navigate smoothly through interactive graphical dashboards. Solutions often focus on the functions required for automating a given process, but the actual efficiency of that process can only be seen with indicators and dashboards. Streamline for Invoices integrates a robust data visualization tool that quickly and easily provides relevant indicators to the employees who need them. Finance and accounting departments can use this information to optimise their processes and steer both their own performance and that of their organisation, while enabling other departments to gain their independence.

## **FAST RETURN ON INVESTMENT**

**Streamline for Invoices is a complete packaged solution that offers the benefits of modular design to adapt to each organisation's specific needs, regardless of size and invoice volume, giving clients a unique opportunity to make a smooth move forward with supplier invoice processing. Combining the advantages of the Cloud with those of internal deployment, the solution enables companies to reduce costs while increasing agility and responsiveness. A lever for competitiveness and a tool for managing performance, Streamline for Invoices helps organisations establish better relations with their partners, especially suppliers. The benefits accelerate more than just ROI.**





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