

White Paper

2022 Guide to OCR, Invoice Scanning & Data Capture





Most organizations say manual data entry and the high volumes of email and paper invoices they receive are a huge challenge

The Invoice Capture Challenge

Third party reports from the field confirm the challenge organizations face when capturing invoice data. 80% to 90% of invoices received by both medium and large size companies is either paper or email.

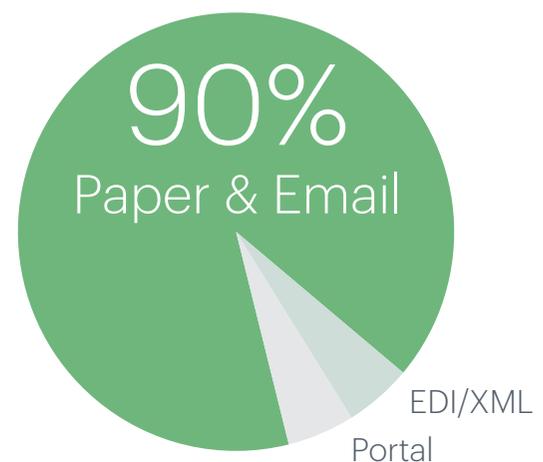
As you can see from the charts presented here, even with the advent of technologies such as EDI and network portals, the bulk of both invoice receipt and invoice data entry revolves around paper and email.

So how are organizations tackling invoice capture? Not very efficiently:

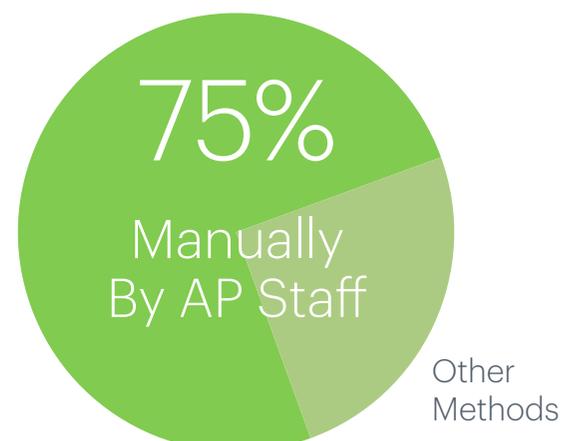
- Paper invoices are handled and entered into accounting systems manually
- Emailed invoices from suppliers are printed out and manually keyed into the ERP
- Invoice scanning is done with legacy OCR technology that has limited functionality, depth, and integration capabilities
- For growing companies, larger invoice volumes has meant adding staff
- Most ERP solutions do not have the functionality to automate these areas

Paper & Email Dominates in North America

How Companies Receive Invoices



How Companies Enter Invoice Data



Capturing Paper & Image Data with OCR

Formats Suited to OCR

- Paper Invoices
- Visual Digital Format Invoices
 - JPG, PNG, GIF (picture formats)
 - TIF (from scanning software)
 - PDF containing a scanned image

Because paper invoices and invoices sent as an image have no data layer, each invoice has to be scanned by Optical Character Recognition, or OCR. The collected data is then input to the ERP or accounting system.

Resource Implications

Manually capturing essential data fields from emailed or paper invoices is time consuming and resource intensive. AP departments handle mailed or emailed invoices in various ways, with most of them keying in the data manually, a time consuming and error-prone process at best.

Conventional or legacy OCR systems often require manual input in order to function because of the time and effort for both field mapping and the collecting of data after it has been captured.

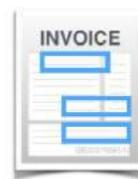
The latest advances in OCR technology reduces the amount of time involved in legacy OCR, introducing automation and intelligent data collection and retrieval.

2022

95% accuracy rates are achievable with Palette Capture technology

The Evolution of Invoice OCR for AP

Traditional OCR - 2000s



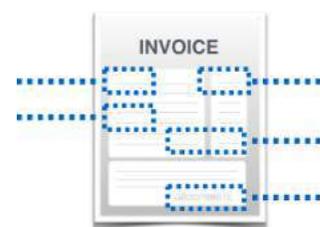
OCR is used to process either paper or emailed invoices, and the invoice layouts are manually field-mapped. There are often issues with integration and a lack of workflow.

Advanced OCR - 2014

OCR is able to detect the invoice type based on its layout and sorts it accordingly.



Palette Capture - 2022



The Palette Capture solution teaches itself to identify supplier invoices based on their layouts and then automatically stores that information for future reference.

Palette Capture also intuitively maps the data fields in each invoice using intelligent tags, called "intellitags", as identifiers, and stores them in a database.

Because of the use of automation and smarter processing, 95% accuracy rates are achievable with the Palette Capture solution.

Capturing Electronic Format Invoices

Formats Suited to Digital Capture

- Digital/Electronic Invoice
 - Spreadsheet (Excel)
 - Word (.doc)
 - HTML
 - XML
 - Data PDF
 - EDI (EDIFACT)
 - CSV

A digital or electronic invoice is a document that exists in a digital format (composed of data in the form of binary digits). It's output by a supplier's ERP system as either structured or unstructured.

Structured Digital Format

Invoice data can be captured by capture technology with structured digital format invoices such as: XML, EDI, Data PDF, HTML, CSV, Spreadsheet, Word (.doc)

Unstructured Digital Format

Invoice data cannot be automatically read from unstructured digital format invoices.

However, most ERPs can output a structured digital format, such as a PDF. The majority of invoices received by email in 2022 are structured invoices in one of the formats listed above.

2022

Accuracy rates of **100%** thanks to the data layer inside each electronic format invoice

The Evolution of Digital Data Capture for AP

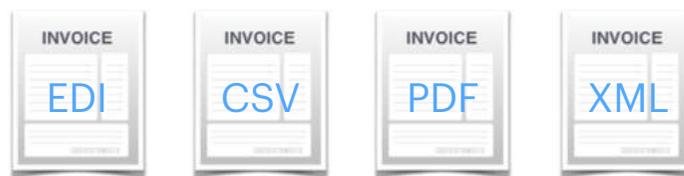
Traditional EDI - mid 1960s



Companies have their own form of electronic data interchange until the establishment of the ANSI X12 EDI standard.

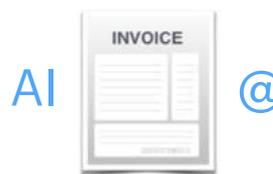
Web-based Portals - 1990s

Online submission of individual invoices as well as EDI file uploads, including CSV, PDF, and XML formats.



Palette Capture - 2022

ANY FORMAT



Automation

A digital format invoice is sent to a designated email address where capture automation and AI instantly reads the data and extracts it, forwarding the invoice data to the buyer's ERP.

Because the electronic file has a data layer that reflects exactly what was input, the information transfer is 100% accurate.

Invoice processing happens automatically and within minutes of receipt.

Capture Methods Compared

Invoice Format	Speed to Set Up	Infrastructure Changes	Cost to Buyer	Cost to Supplier	Data Accuracy	On-Boarding Rates	Technology
PDF/Electronic	Fast	None	¢	Free	100%	High	Palette Capture
Email	Fast	None	¢	Free	95%	High	Palette Capture
Paper	Fast	None	¢	Postage	95%	High	Palette Capture
Portal	Fast	Some	\$\$	\$\$	Low	Low	Network
EDI/XML	Slow	Many	\$\$\$	\$\$\$	100%	Low	EDI

For organizations that want to capture invoice data digitally, there are a few things to consider before choosing the best capture solution.

The business case is based on considerations such as:

- the time it takes for set up
- infrastructure changes and I.T. resources
- the cost to the buyer
- the cost to the supplier
- data accuracy
- on-boarding rates

Speed to Set Up

How long will it take to set up and implement the technology to capture invoice data efficiently? Palette Capture is fast because the supplier only has to send the email invoice to a designated email address. Palette Capture also accepts scanned documents, so the supplier can continue to send paper invoices if they need to.

2022

No costs incurred by suppliers

Infrastructure Changes

What infrastructure is necessary on the supplier's end? Palette Capture has no infrastructure requirements on the suppliers end, because most ERPs can output an invoice in PDF or other electronic format.

Cost to the Buyer

What is the cost to your organization? Things to consider are user licenses and software costs. The cost for Palette Capture is low because pricing is based on volume.

Cost to the Supplier

Palette Capture is free for suppliers.

Data Accuracy

What data accuracy can you expect? For paper invoices, 95% accuracy rates. For electronic formats, 100% accuracy rates. Encouraging suppliers to send an electronic format instead of paper benefits both parties - lower costs, accuracy, and faster payment cycles.

On-Boarding Rates

How many suppliers will on-board to your invoice capture solution? On-boarding rates for Palette Capture are high because there is no cost to the supplier, and all suppliers need for emailed invoices is a designated email address.

Palette Capture Solution Workflow

Palette provides more than just invoice data capture.

Once the invoice data has been captured, the Palette solution provides approval workflow, PO matching, and a searchable invoice archive.

- **Approval Workflow**

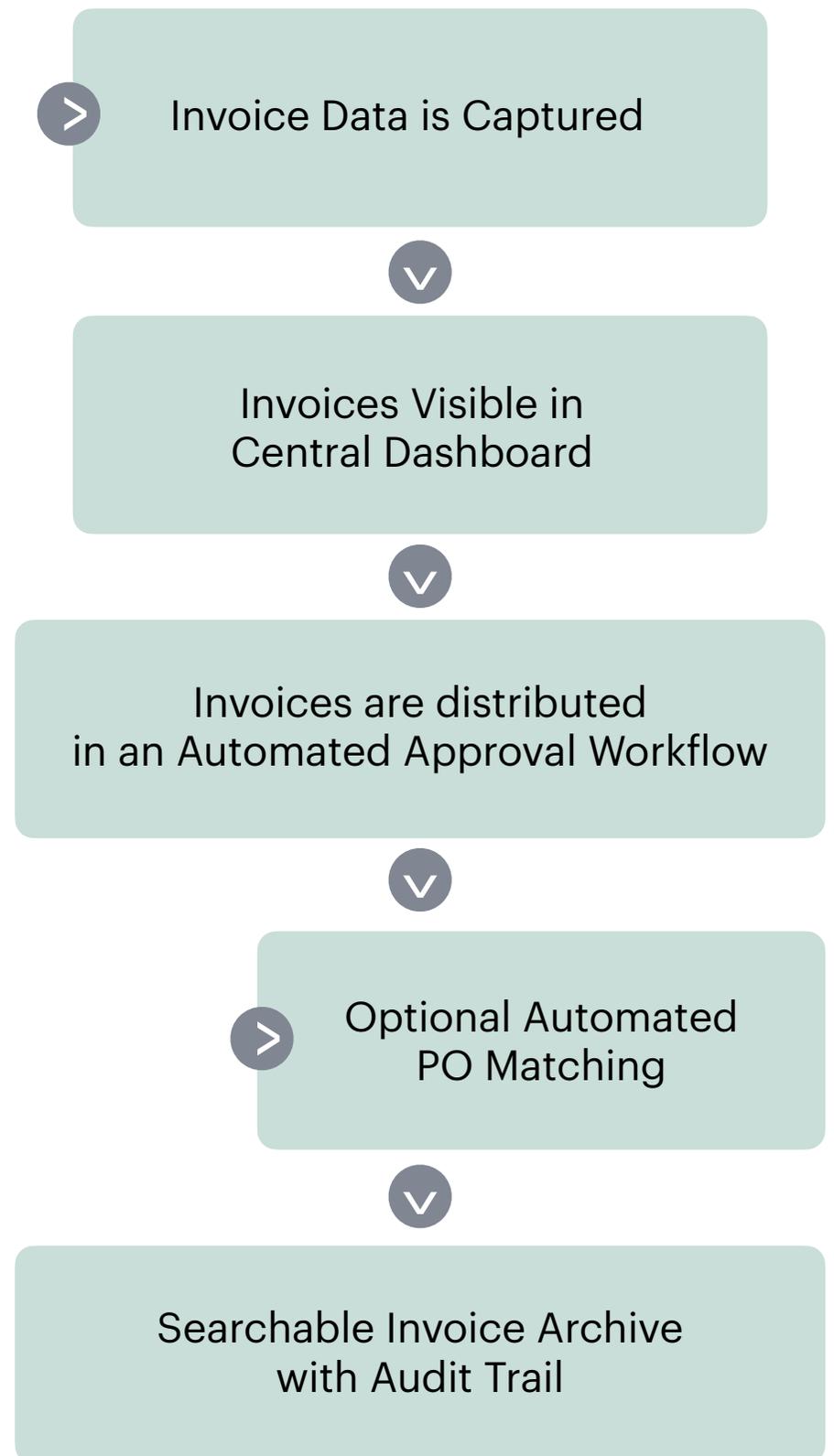
Invoices are gathered into a central dashboard, and automatically sent to users to review and approve. Automatic notifications for approval are sent to those designated.

- **PO Matching (Optional)**

Palette automates the matching of invoices, purchase orders, and goods receipts. If an invoice matches all of the criteria of an associated PO the system transfers the invoice directly to the ERP for recording. Exceptions are flagged and sent to approvers for reconciliation.

- **Archive and Audit**

Invoices are stored in the cloud for searching and archiving purposes. A complete time-stamped audit trail is provided for external audits and internal investigations.



Palette is now

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