10 THINGS YOU NEED TO KNOW ABOUT INTELLIGENT CAPTURE



Introduction

Intelligent capture is an advanced technology that's causing a fundamental shift in the way businesses read and process paper and electronic documents, unlocking their value in real time.

As intelligent capture advances across departments and industries, it's catching the attention of process managers and upending assumptions about traditional business routines, interactions between groups in the organization and even the permanence of what were once considered fixed process costs.

Let's dive deeper into the 10 things you need to know about this revolutionary technology.





Intelligent capture cuts labor costs and maximizes human capital

The energy and potential of your staff is being wasted if it's spent on manual tasks and tedious routines like reading and keying in invoices, orders, remittances and other documents — day after day, year after year. However, automation has always been blamed for displacing low-skill and menial-task jobs. But the reality is that **reducing manual tasks is a key driver of an economy's productivity** and elevates living standards for everyone.

Just as the hand-crafting of goods gave way to assembly lines staffed by humans and eventually robots, the growing flow of paper and even electronic documents required by the information economy are also yielding to automated processing — with a level of sophistication that could have hardly been imagined only a decade ago.

Template-driven optical character recognition (OCR) represented the first wave of this transformation, allowing computers and billing systems to read printed characters and even handprint at a basic level. But early error rates were high, text had to be in defined locations on specific pages and the logic of interpreting the extracted text was primitive.

After years of slow, almost evolutionary change, intelligent data capture burst onto the scene. For the first time, businesses realized that the value-add of human document processing, once considered a fixed and perpetual reality, might finally be eliminated, or at least greatly reduced.



INTELLIGENT CAPTURE SPEEDS PROCESSING, PROPELS FINANCIAL OPERATIONS FORWARD

One organization challenged an intelligent capture platform, Brainware, to extract all of the data from more than 3,000 invoices, sight unseen, using intelligent capture.

Despite a wide range of formats from different vendors in multiple languages, and occasionally invalid or missing data, 35 percent of the documents went straight through Brainware's capture system. They posted into the ERP system without manual intervention, and 90 percent of the required data fields were automatically captured.

After implementing the software in their production environment, the company reduced headcount by 80 percent within three days. It now sees a scan-to-post success rate for first-time invoice formats at over 50 percent.

Accounting managers estimate that Brainware's continuous self-learning capability could eventually provide an additional 20- to 30-point boost to that number.

A solution with this level of success translates into less tedium for financial operations professionals and more human capital for tasks that challenge, engage and move the organization forward.

Together, the gains made possible by intelligent capture technology allow businesses to act faster — gaining productivity, improving customer satisfaction, and in the case of accounts payable, turning this efficiency into early-payment discounts.



Intelligent capture reduces cycle time

Cycle time is another way of saying how long a recurring process takes. An intelligent capture solution can:

- Recognize and sort documents quickly, even in new formats, by reading document content
- Extract and interpret document data, and validate it faster than any human
- Eliminate bottlenecks in manual workflows and physical document handling
- Enable the instant transfer of extracted information into content management, ERP and other business systems where it can be searched, analyzed, acted on and synchronized with existing data elements



Intelligent capture improves accuracy

Back when computers filled entire rooms and were operated only by the elite, enlightened few, a popular office placard said, "To err is human. To really foul things up requires a computer."

If you've never seen intelligent capture work, the idea of feeding a stack of diverse documents into a scanner, walking away and allowing the attached computer to pay the bills — or do some other crucial task based on what it reads — might sound like a risky proposition. But you can relax, because **this technology is engineered to identify and make sense of a wide variety of documents**, regardless of their size, format, language, symbols used and image quality.



Furthermore, intelligent capture technology can rapidly validate data it finds against existing content management, ERP, accounting and other back-end systems. This means you get an additional layer of protection that even human operators, reading and keying data from documents, can't duplicate without tedious manual lookups.

Mature intelligent capture technologies routinely achieve high rates of field-level extraction out of the box. They can be configured to spot unreadable data or results outside of predetermined accuracy thresholds and pass these incidents to operators for correction or decision-making.

Additionally, supervised learning technology offers the ability to quickly respond to evolving document-reading challenges via the program's verification interface while the system itself continues to get smarter.



Supervised learning technology offers the ability to quickly respond to evolving document-reading challenges.



Intelligent capture is a compliance power tool

It's not just good ethics to follow the rules. It's increasingly necessary from a legal perspective, as regulatory requirements multiply and businesses are required to limit access to sensitive data. It's also important to track, report on and potentially defend the activities they're engaged in.

It's obvious that piles of paper, and the people handling them, present the risk of releasing confidential information. And beyond the security controls provided by intelligent capture systems themselves, easy integration with content management systems supports automated ways to index, search and — with proper privileges — compile documents needed for discovery or other legal proceedings.

Plus, the automated logging of user activity and approvals represent an audit trail that can provide evidence of who did what and when.



Intelligent capture is massively scalable

Information-related capture problems tend to not solely affect a single department, team or process. Problems generally surface in areas across the organization and within those individual processes. As businesses grow so, too, do efficiency problems.

Generally, this can mean hiring additional staff or simply taking on the risks of even slower processes.

Intelligent capture is extremely scalable, growing with the business where more incoming information does not mean strain on additional staff. Instead, the system simply continues to learn and efficiently process through new and additional volumes of documents.

Intelligent capture solutions can run in the cloud or on-premises. You can start small, paying only for what you need, and adjust your capacity as your needs become more demanding.

The importance of intelligence in scalability

Historically, automated capture has been entirely dependent on setting up exact templates where human operators have to map out where data is on a given document. This poses specific issues when considering scalability.

Intelligent data capture solutions alleviate this problem. They tend to have the following human-like traits:

- See patterns to help identify important information
- Learn from mistakes and apply it to the new and unseen through generalization
- Understand imperfections and adapt small changes in document format or quality

To stay ahead of the constant changes within your organization, intelligent capture solutions continue to evolve with you. Not only can they apply what they've learned to document changes, they can also learn new documents based on what they already know and expand to new areas of your organization as needed.



STREAMLINE AP OPERATIONS

Few companies represent a bigger volume challenge for capture technologies than a global company with 90,000 employees in more than 80 countries and territories.

Thanks to enterprise-scaled levels of throughput and reliability, one company's financial shared services organization was able to centralize their accounts payable operation in a single location and establish a standardized global protocol for processing invoices into their SAP system.



With intelligent capture, paper is only the beginning

There's no doubt that capture technologies were developed to remove the pain from handling paper, but modern supply chains and data flows mean you sometimes have to work with many electronic file types. And making your first encounter with such data an on-screen review is no more helpful than doing old-fashioned, front-end capture, which still requires manual, on-screen reading and interpretation.

With multi-channel intelligent capture solutions, virtually any file format — including HTML forms, PDFs, EDI feeds, XML and other document sources — can be read and interpreted just like a piece of paper, without the inherent optical limitations of scanning.







File format can be read and interpreted just like a piece of paper.

Intelligent capture isn't just for accounts payable

While automated capture technology has a strong track record in accounts payable, it's solving problems in other parts of the enterprise, too.

Take note of areas around your organization where large volumes of documents and information are regularly processed. Start asking questions of these processes with business owners such as:

- How many human touchpoints happen within that process?
- Where does information need to go when it enters the process?
- Does the information need routed through a specific system or person? How does it get there?

Through these conversations, it's likely you'll hear about many manual parts to these processes like data entry and document classification.

Although these processes may function fine today, in reality they are slowed by human interaction and are prone to errors. This is where automated capture solutions can help the organization to better the quality of data and speed processes and the decisions that depend on them.



When a backlog of transfer credit evaluations kept the University of Arkansas (U of A) from responding to and winning potential students quickly, they turned to Brainware for Transcripts. By integrating with their PeopleSoft system to speed transcript processing, the solution accelerates transfer credit evaluations and gets high school coursework data they didn't have before.

"Instead of two offices having to physically touch and manually evaluate the same transcript, the Admissions office is able to use the work from the Registrar office to admit students much faster," said Robin Carr, director of Academic Records at U of A. "The data extracted by Brainware and integration with PeopleSoft means we are not duplicating work and we're less likely to receive duplicate transcripts, too."

With Brainware, U of A was able to eliminate the overtime employees used to need each year to process transcripts during peak enrollment season. The University is also able to repurpose staff to do additional equivalency work and help out in other areas to prevent backlogs.



Intelligent capture supports reporting and analysis

An important part of any solution is the ability to gain insight into your processes and monitor system performance. You should be empowered to leverage this information with tools that provide dashboards and reports on business processes.

An intelligent capture system like Brainware has built-in consoles that let you oversee batch status, operator statistics, extraction accuracy, and reporting and analytics tools to help you gain immediate insights about your document-processing operations. If you prefer, you can also integrate with third-party reporting tools.

With manual document processing, this data gathering would be just one more step for an overburdened staff member. With intelligent capture, it's a natural and easy-to-execute byproduct of the intelligent capture process.



Intelligent capture offers rapid ROI

Successful organizations don't just look at the cost of a new tool. They also look at the gains each tool offers in terms of efficiency, cost control and revenue generation. Being able to pay for itself over time originally drove the adoption of previous generations of OCR, but intelligent capture takes that concept to a stratospheric level.

In fact, the return on investment of intelligent capture technologies is typically 12-18 months, although some customers can reach this milestone sooner.

"As a result of all the automation we've deployed, we're using the same number of staff members in AR today as a \$1.5 billion company as we did as a \$200 million company. ...
This intelligent capture solution is a key element of keeping our AR staff at an effective and efficient level."

Ken Erdner

Vice President of Information Technology
Old Dominion Freight Line



Intelligent capture hits the page running

Intelligent capture software, such as Brainware, is designed to process unstructured documents without templates, keywords, exact definitions, taxonomies or indexing.

Following a short installation and configuration period based on processing a limited number of good sample documents, systems will be ready for user acceptance testing, followed by actual work — and all the benefits previously mentioned.



unstructured

documents.



For more information, visit **Hyland.com/Brainware**