Brainware by Hyland

Hyland Whitepaper

Ten Things You Should Know About Intelligent Data Capture

To someone who doesn't work in the field, the phrase "intelligent data capture" could easily sound like a dressed-up catch-all term for anything from taking notes on your laptop to tracking readings from lab instruments.

But Intelligent Data Capture, or IDC, is actually 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 IDC 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.

1. Intelligent Data Capture cuts labor costs and maximizes human capital

The energy and potential of your staff is being wasted if it's being spent on manual tasks and tedious routines like reading and keying in invoices, orders, remittances, and other documents—day after day, year after year. Over the years, 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 hand-print 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.

For example, one organization challenged the Brainware Intelligent Capture software to extract all the data from 3,028 invoices, sight unseen, using intelligent data capture.

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

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

Accounting managers estimate that the application'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 IDC 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.

2. Intelligent Data Capture reduces cycle time

Cycle Time is another way of saying how long a recurring process takes.

Intelligent Data Capture 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 ECM, ERP, and other business systems where it can be searched, analyzed, acted on, and synchronized with existing data elements

3. Intelligent Data Capture improves accuracy

Back when computers filled entire rooms and were operated only by an 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 IDC 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 IDC 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, IDC technology can rapidly validate data it finds against existing document 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 IDC technologies routinely achieve average field-level extraction of up to 80% or more 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.

4. Intelligent Data 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 IDC systems themselves, easy integration with enterprise 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 represents an audit trail that can provide evidence of who did what, and when.

5. Intelligent Data Capture is massively scalable

Some Brainware Intelligent Capture systems are reading more than a million documents a day, and they don't take any sick days.

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 operations in a single location and establish a standardized global protocol for processing invoices into their SAP system.

With options for running Brainware Intelligent Capture on an in-house server, or in the cloud, you can also start small, paying only for what you need, and adjust your capacity as your needs become more demanding.

6. With Intelligent Data Capture, paper is only the beginning

Your documents called and said they're no longer just ink or toner pressed into wood fibers. There's no doubt that IDC 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 IDC, 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.

7. Intelligent Data Capture isn't just for accounts payable

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

One Hyland customer faced lengthy and complex remittance processes. Typically, checks and remittances were received by lockbox providers. They would scan and transmit both documents electronically, where

eight FTE workers would key the data at a speed of 400 remittances per hour.

The company implemented Brainware Intelligent Capture for Remittances, which enabled it to boost its accounts receivables productivity by between 400% and 500%. As a result, weekend backlogs were more or less eliminated and almost 80% of remittances processed through the system are handled with no human involvement at all. Now regularly achieving 2,000 remittances processed each hour, they have also expanded the capture platform to the automated processing of shipping documents.

Imagine being able to pull, and rapidly compile, detailed information from invoices to measure and compare things like energy usage between two business units.

8. Intelligent Data Capture supports reporting and analysis

There's no need to have blind faith in the benefits that IDC technology offers.

Brainware Intelligent Capture has built-in consoles that let you oversee batch status, operator statistics, extraction accuracy, and serious 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 IDC, it is a natural and easy-to-execute byproduct of the intelligent capture process.

9. Intelligent Data 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 business's adoption of previous generations of OCR, but IDC takes that concept to a stratospheric level.

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

10. Intelligent Data Capture hits the page running

Intelligent Data Capture software, such as Brainware Intelligent Capture, 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 mentioned above.

To learn more or get your hands on cost-saving capture tools, engage your Hyland account manager or visit us at Hyland.com/Brainware and OnBase.com/Capture.