Smart Solutions with Intelligent Capture
Introduction

Content capture in the past decade has become a ubiquitous facet of ECM deployments in the enterprise. Whether you rely on integrated suites with embedded capture tools or best-of-breed capture systems, you’re using capture to some degree or magnitude. Capture ensures all inbound content be uniformly digitized, inscribed with metadata or otherwise tagged and indexed, and ultimately routed to appropriate departments and personnel in an organization.

Capture serves as the front desk to all ECM systems, through which all information passes. Today, the question is no longer if you capture, it’s what you capture, how you capture it, when you capture it, and who performs the capturing. What we are talking about here is the degree of capture maturity in your organization.

How would you describe the highest level of capture maturity in your business unit (across in-house and outsource)?

1. We capture content to the process and use adaptive/intelligent process workflows, 9%
2. We scan documents, invoices and/or forms, and capture data to the process, 14%
3. We scan documents and forms, and capture (OCR) text for routing or indexing, 18%
4. We scan documents and forms, and route the flat image through the process, 16%
5. We only scan things occasionally, 8%
6. We use scanners for office tasks, but not as coordinated input or archive, 17%
7. We scan documents as image only, primary for archive, 18%

Today’s generation of capture functions as if it has a brain. This generation of capture, aptly known as intelligent capture, uses algorithms and advanced data extraction software to “read” and validate captured content through context and applied operational rules – as if it were thinking. It’s responsive, accurate, and capable of mass workloads.

In a world fraught with risk of fraud, intelligent captures learns, improving recognition rates and accuracy levels over time – increasing the value of its results and your investment.
In the Beginning

Before capture systems had any semblance of intelligence, we first gave them a way to see using Optical Character Recognition (OCR). This typically consisted of and was restricted to the use of document templates using designated areas for data extraction. This required placing data in specific data fields of a form or document, in order for it to be captured, extracted, and saved. Early form template-based OCR carried the weakness of inflexibility of data type, lacked accuracy, and necessitated a significant amount of manual interaction, which made it slow.

Getting Smarter

Intelligent capture quickly evolved to include memory. Now, keywords, mapped fields, or templates are “remembered” by the capture system and recalled automatically when needed; the capture technology was learning. But this process was too contrived to be real learning, and favored brute force memorization direct to a database, as opposed to fluent, adaptive thought and recall. For these reasons, many of the same issues seen in earlier forms of intelligent capture persisted. For instance, the capture system required countless hours of manual rehearsal to improve its recognition of forms and templates, which consequently made this process expensive, slower still, and intolerant to content in formats outside what it has been practiced in.

Graduation

After building on years of iteration, today’s intelligent capture is a marvel of advancing the ability of technology. Doing well to remediate the shortcomings of its predecessors, intelligent data capture systems available presently offer streamlined recognition processes (faster), utilize advanced pattern recognition to perceive words and be sensitive to context (limiting manual data entry), and accept the gamut in content format and complex documents without sacrificing accuracy. An important example of these improvements is seen in modern-template based solutions, which through added intelligence, have overcome past limitations that made them unwieldy. Many of today’s templates are no longer inert, or fixed like printing blocks, but synergistically work with end users to discover correct words via rulesets and tagging, and assist in filling fields without requiring absolute precision.

Gaining the Benefit

Intelligent capture systems bring a myriad of benefits to the enterprise, but here are four for you to keep in mind. The first benefit is reduced processing cost and overhead by reducing the human resource investment due to automation. This is important because human resources freed from tasks now completed by automation can be redeployed to other critical business areas.

Second, intelligent capture solutions offer increased collaboration and more accessibility for remote workers. This improvement helps lessen an organization’s reliance on shared location, or even shared work hours, to enable dynamic collaboration between employees. A digital workplace centered on intelligent capture is very flexible, and promotes a more organic way for employees to interact and work with one another, therefore increasing employee contributions and wellbeing.

Third, consistent capture at first touch allows heightened data security ensuring content is routed to the correct directories at the earliest possible point, and that only individuals permitted to access that content are able to. With capture at first touch, data is always where it needs to be, when it needs to be there, decreasing the lag time that is typical in manual or paper processes. In addition, security procedures can be more consistently, as well as more quickly, enacted on all inbound content entering the enterprise, safeguarding against costly data loss and security breaches.

Finally, intelligent capture links content to an audit trail to assist in compliance with government regulation, and to maintain precise retention of records or other sensitive data. In times of crisis such as a court order or audit, intelligent capture preserves your records and sensitive data, and ensures...
you can locate, retrieve, and utilize your data, when you most need it. In this way, intelligent capture when supported by an enterprise content management system offers many benefits, and is a powerful resource to deploy in your organization.

**Conclusion**

Data capture has come a long way and continues to evolve. With each new revision, each growth spurt, data capture has developed in strides, not increments, and its progress seems on course to continue this trajectory. Technology today has the ability to recognize various types of information as it is captured, and through automation, enables a breadth of possibilities for the enterprise. Intelligent capture solutions alone will not revolutionize your organization, or digitize your workplace. Yet, ECM deployments centered on intelligent capture systems can be a powerful tool to manage data in the enterprise.

- What takeaways should be at the forefront of your mind when considering an intelligent capture product for your organization?
- Real Learning—find out how reliant a capture system is on static templates or the length of time needed to “teach” the system various document types and formats. How does the capture system hold up to documents it has never seen before?
- Accuracy—be mindful of capture system accuracy with respect to the most common types of data your industry or organization plans to capture.
- International Considerations—if you do business abroad and need to capture data that uses a different language or currency than what is used locally, can the capture system accommodate the change?
- Flexibility— in today’s fast paced business environment, adaptable systems and nimble solutions that can fulfill hybrid roles in the enterprise are often an invaluable asset. If your business requirements demand versatility, prefer intelligent capture systems that compound content management, capture, and process automation capabilities in one package.
- Thinking intelligently— the intelligent capture system needs to be intelligent. Ensure the product mirrors human comprehension through context and genuine error recognition, not through a powerful a memory bank supported by templates.

**References**

1 AIIM Industry Watch Paper free Progress – measuring outcomes [www.aiim.org/research](http://www.aiim.org/research)

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