Exploring Intelligent Capture

Extensive Technology Stack Helps OpenText™ Eliminate Barriers that have historically held back adoption of Advanced Capture Technologies

A look at how OpenText™ continues to position itself in a leadership role, in the evolving market for Intelligent Capture technologies, updated by Bryant Duhon, Editor, Document Imaging Report, an Infosource Publication

Document Capture has a proven ROI. Whether it's through reduced manual labor, faster transaction processing times, improved accuracy, better visibility into operations, or a number of other factors, a recent study by AIIM indicated that 84% of respondents reported achieving ROIs from their document imaging projects within 18 months or less, with 59% achieving ROIs within 12 months. AIIM reported that these gures were among the highest ROI rates ever reported—"for Capture projects, or any other ECM investments."[1]

This almost certainly has something to do with the relatively recent introduction of Intelligent Capture methodologies into the market. Automated capture of data from structured documents like medical claims and tax forms has been in widespread use for more than 20 years. Intelligent Capture, which leverages machine-learning and AI to bring features like auto-classi cation and automated extraction from unstructured documents (such as contracts and other complex forms) to bear, has only started to be fully leveraged in recent years. And some of the results have been impressive!

For example, Ameritas Life Insurance Corp., a Lincoln, NE-based business with more than $2 billion in annual revenue and more than $25 billion in assets
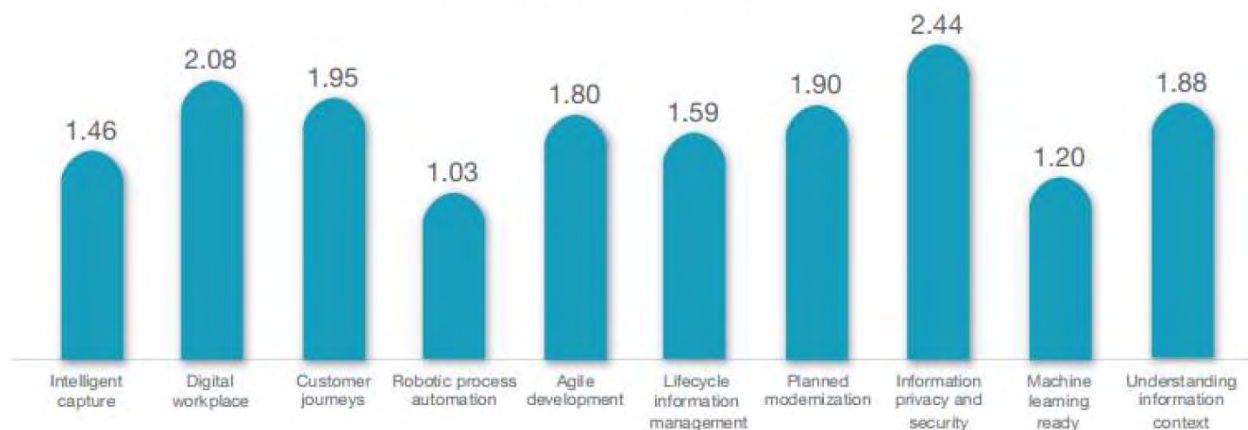
under management, implemented Intelligent Capture to replace a legacy Basic Capture system. Through this implementation, Ameritas was able to increase its auto-classification of incoming documents by 55%. By being able to auto-classify 15 million documents a year, compared to 9 million previously, Ameritas was able to close one of its document scanning centers and absorb additional workload without increasing staff.

Capitec is a South African Bank with more than 10 million customers and 800 branches in its home country. Under pressure from fintechs to speed up its loan approval processing, Capitec implemented OpenText Intelligent Capture on the front end of a Documentum™ xCP workflow system. When a client walks into a Capitec branch with paperwork like their application form, as well as an ID, a branch worker can now scan them and have the documents immediately classified and moved to the appropriate workflow without having to disengage with the client to manually enter information. On a busy day, Capitec services nearly a half million customers and its goal to is get them an answer before they leave. This type of service resulted in Captiec recently being benchmarked twice as the leading bank in the world in industry rankings by London-based Lafferty Group.[2]

Despite examples of impressive savings and ROIs, a 2021 AIIM State of the Industry survey showed that of 10 Core Intelligent information Management Competencies, Intelligent Capture rated the third-lowest in terms of maturity and understanding by end users. (See Graphic)

How would you grade your organization's competency in each of the following areas? (4 point scale, A = 4)

DOES NOT INCLUDE "DON'T KNOW" AND "NOT RELEVANT" RESPONSES IN AVERAGES.

Intelligent capture	Digital workplace	Customer journeys	Robotic process automation	Agile development	Lifecycle information management	Planned modernization	Information privacy and security	Machine learning ready	Understanding information context
1.46	2.08	1.95	1.03	1.80	1.59	1.90	2.44	1.20	1.88

©2021, AIIM – redistribution with attribution permitted – Overall N = 222

It's not that users don't recognize the advantages of utilizing Intelligent Capture. In a 2019 AIIM survey focused on Intelligent Capture, 64% of respondents reported that a project designed to help them expand from "Basic" to "Intelligent" Capture was planned for within the next year.

So, while a majority of users recognize its benefits, adoption rates of Intelligent Capture lag behind. There are a number of likely reasons for this:

- Intelligent Capture hasn't reached mainstream adoption, so many users remain hesitant to implement it—preferring to stick with the herd mentality.
- Introducing Intelligent Capture typically involves adding another moving part to an already complex Capture operation.
- Even though the ROI can be substantial, it can still be expensive and time consuming to implement the technology.

Putting the Pieces in Place for Success

OpenText is working to break down these barriers. This includes leveraging resources picked up in two major acquisitions:

1. Captaris, a company best known for its fax server technology, but which had itself previously acquired a leading document Capture software developer.
2. The Enterprise Content Division (ECD) of EMC™, which brought with it market leading Capture software formerly branded Captiva.

When combined with OpenText's existing internal Capture initiatives, including its Magellan™ AI project, the ISV now has a full suite of offerings that can address everything from tools for creating third-party Capture applications, to advanced recognition, to market-leading Capture for SAP environments.

"As business is digitally transformed, a trend which has only accelerated during the pandemic, Intelligent Capture technology becomes increasingly important," comments Ralph Gammon, Senior Analyst at Infosource Software. "Leading information management companies like OpenText have recognized this trend and have introduced Intelligent Capture as an integral piece of their solution suites to meet emerging market needs."

Being able to offer Intelligent Capture integrated with a wide breadth of information management software should make it easier to implement than it historically has been. Let's take a look at how OpenText addresses the barriers to entry for Intelligent Capture that we've identified.

What Is Intelligent Capture?

We should start out by listing features of Basic Capture, which include scanning, batch management, image processing, and OCR. Capture from fixed/structured forms can also be included in this category.

Intelligent Capture technology builds on this and primarily focuses on two areas: auto-classification and extraction from documents that are unstructured or have varying structures—in other words the data that needs to be extracted can appear in different places. OpenText can also incorporate advanced Capture workflows for seamlessly executing complex processes, as well as artificial intelligence to improve results.

Let's take a look at each of these functions and how they can benefit users:

Auto-classiication: Document preparation is one of the hidden costs of document imaging. Studies have estimated that it can make up more than a third of the cost of a document Capture operation.[4] Preparation can involve tasks like staple and paper clip removal and damage repair, which can't be automated. But, it can also include document sorting and batching—and this is where auto-classification can be applied. Instead of having a person manually separating documents, dividing them into stacks, and inserting separator sheets— image and text recognition algorithms can be used to automatically perform these tasks. As a result, auto-classification can drastically reduce document prep time and eliminate bottlenecks that prevent today's high-speed scanners from being utilized to their full capacity.

In addition, as digital transformations accelerate, and a wider breadth of documents needs to be on-boarded into digital processes, auto- classification becomes even more valuable. It can be leveraged to automatically sort documents into the correct workflows where they can be addressed in real time if need be.

Auto-extraction from unstructured documents: Historically, applying automated data capture successfully was as much about forms design as it was about OCR. But, what about forms that an organization doesn't have any control over? In recent years, the market has expanded from Capturing data from only structured forms to also being able to process variably structured forms like invoices.

Intelligent Capture broadens the scope even further and is able to be used on unstructured forms like contracts and financial reports. Applying Capture to these types of forms can produce tremendous ROI, because they historically have been processed by knowledge workers with higher wages that data entry clerks.

Advanced Capture Workflow: OpenText's Intelligent Capture solution is built on a proven platform and incorporates the ISV's unique CaptureFlow Designer. This intuitive tool can be used to connect multiple capabilities and line of business applications in Capture processes.

These "CaptureFlows" can include specialized recognition and AI engines, database look-ups, reporting, and export, and be used to initiate highly automated processes that minimize the need for exception handling and manual validation. This technology has been has been described by current customers, partners and systems integrators as a "key differentiator" for OpenText.

Artificial Intelligence (AI): AI-driven classification and extraction can combine techniques like keyword matching, natural language processing, and semantic understanding. Business rules can also be incorporated, as well as techniques like machine learning (which can also be utilized in auto- classification.) It might not automate 100% of the capture, but confidence threshold levels can be built in, and steps like manual verification and database look-ups can be implemented to increase and ensure accuracy.

The goal is not to eliminate manual interaction with the documents but to reduce it and therefore increase efficiencies.

As we mentioned, OpenText has a wide breadth of software to enable a range of Capture applications from basic to advanced. Let's take a look at this portfolio:

OpenText™ Intelligent Capture: A market leading enterprise-level Capture application. It's designed to handle high volumes and can run across multiple departments and manage complex Capture workflows. It's also tightly integrated with multiple back-end ECM systems, including OpenText™ Documentum™.

OpenText™ Core Capture: A SaaS Capture application, it has the ability to ingest content from multiple channels, and offers auto-classification and extraction capabilities, as well as metrics reporting. Machine learning and AI are leveraged to increase automation capabilities.

OpenText™ RightFax™: Market leading fax server application that can be used to capture faxes as images and submit them straight to a workflow without ever being printed.

OpenText™ Intelligent Real-Time Capture: A service that offers almost immediate image clean-up, bar code-reading, and classification, as well as near real time simple metadata extraction. It is designed to provide immediate feedback to mobile users and for large batches that require fast turnarounds. It can be deployed as an extension of Intelligent Capture or as a standalone app, and custom scripting can be used for third-party integration.

AI-Augmented Capture: Powered by the OpenText™ Magellan™ AI- platform, it integrates natural-language processing (NLP), context processing and AI-based analytics to understand text, add context and automate classification, entity extraction and routing at scale. The OpenText Magellan- powered AI-Augmented Capture FasTrak Service helps to ensure a smooth implementation.

Advanced Capture

OpenText™ Intelligent Capture Advanced Recognition: This is the OpenText's auto-classification and unstructured document extraction technology. In addition to including all Intelligent Capture functionality, it features automated learning capabilities. This means that the software's accuracy improves over time as it incorporates feedback from the QA and validation processes. Other features like handprint recognition and check capture can also be incorporated through add-on modules.

OpenText™ Vendor Invoice Management for SAP® Solutions: A mature invoice Capture application that integrates with SAP. SAP resells an OEM version. In addition to automated capture from invoices, Vendor Invoice Management for SAP Solutions includes ERP embedded workflow for managing approval.

OpenText™ Core Capture for SAP Solutions: A SaaS-based offering for onboarding multiple document types into SAP. It features tight integration with SAP software and can be utilized without having to leave the SAP interface. It includes pre-defined configurations for most SAP-related documents and features self-learning capabilities to improve automation. It is also on the SAP price list.

Capture Microservices and Embeddable OEM Technologies

OpenText™ PixTools® and ISIS drivers: PixTools is an SDK for scanning, viewing, and image processing that has been used to build several leading commercial scanning applications. It is a mature and proven platform that leverages the ISIS driver protocol to connect with scanners. ISIS, which is maintained by OpenText, is the preferred scanner driver in many high- volume capture implementations.

OpenText™ Capture Recognition engine (Formerly known as RecoStar): A mature OCR/ICR engine that is used in many leading automated data capture applications. It can be used to capture both machine- and hand- printed characters and is noted for being especially strong in applications that require field-level Capture. It is a mature engine that was part of the Captaris acquisition.

OpenText™ Capture Document Reader (formerly DoKuStar): A leading toolkit for document classification and extraction that was also part of the Captaris acquisition. It can be utilized for variably structured document Capture applications.

OpenText™ Core Capture Services: Cloud-based microservices including image processing, auto-classification, extraction, export, validation and reporting capabilities that are designed to be integrated with mobile or line of business applications.

Breaking Down Barriers to Adoption

Let's take a look at how OpenText's Capture portfolio can be utilized to address those barriers to entry to Intelligent Capture that we brought up earlier:

It hasn't reached mainstream adoption: OpenText is no start-up when it comes to the Capture market, and, even though the overall market is lagging in adoption of Intelligent Capture, OpenText already has a significant number of users who have expanded their applications on top of Basic Capture implementations. So, while the market at large may be in the early adopter stage, OpenText's customer base, and its support team, are ahead of the curve.

Introducing Intelligent Capture typically involves adding more moving

parts to an already complex operation: As we've discussed, OpenText has a lot of pieces in its Capture portfolio. Because it owns these pieces, OpenText's engineers are able to work internally to integrate them before bringing Intelligent Capture solutions to market. The Capture technology has already been fully integrated into OpenText's suite, and the engineering team continues to integrate all Capture solutions with additional leading ECM platforms and back-end systems. OpenText can provide everything from Capture tools, to batch management, to OCR, to advanced recognition—this should ensure that it all runs smoothly together.

It can be expensive and time consuming to implement Intelligent Capture: Once again, OpenText's wide breadth of technologies comes into play for overcoming this barrier. Part of the expense of Intelligent Capture has to do with the professional services typically required to integrate it with other systems like Basic Capture and ECM. OpenText owns extensive technology in both areas, which makes out-of- the-box integration more likely than when working with products from multiple vendors. OpenText's wide ECM portfolio also creates the potential for a more comprehensive technology purchase from a single vendor, one in which Intelligent Capture can be bundled. As far as set up and configuration of Intelligent Capture, OpenText continues to focus on making its technology easier to implement through development in areas like machine learning and AI.

OEM Opportunity

In addition to being sold directly to its customer base, OpenText Capture software is made available for use in third-party solutions through the OpenText OEM Program. ISVs and other technology vendors can customize, extend, embed, and white-label OpenText Capture solutions as part of their own offerings to customers, while maintaining independent branding.

OpenText Capture software features prominently in solutions across industries and verticals. For example, in the healthcare space, OpenText Capture technology is deployed within Electronic Medical Records and back-office systems, helping to digitize information for use in downstream processing. In the higher education space, OpenText Capture is white- labeled as part of an offering from a leading ISV for universities. Similar examples abound in the financial services, government services, life sciences, entertainment, hospitality, and manufacturing sectors.

As Capture technology evolves, so too does the OpenText OEM Program.

What began as an initiative to offer discrete Capture capabilities for scanning and content services applications has expanded to include full-scale Capture offerings, Artiicial Intelligence, and offerings in the cloud. Given their breadth of Capture capabilities available to OEM partners and cross-industry experience, OpenText is well positioned to enable the next generation of Capture solutions.

Conclusion

OpenText has invested a lot, and continues to invest more, in Capture technology. The ISV realizes that its customers are not getting the most they can out of their ECM implementations without taking advantage of Intelligent Capture features like automated classiication and extraction from all types of documents. And recently, signs have been pointing towards this investment paying off through increasing interest in the market.

OpenText's wide breadth of technology and continued aggressive investment in R&D ($421 million in its iscal 2021, up 14% from the previous year) and acquisitions should ensure that its Intelligent Capture will continue to move forward faster than the market rate. And OpenText's investment in forward thinking initiatives like cloud capture and cognitive computing will help future proof its entire ECM platform.

Concluded Infosource's Gammon, "OpenText Intelligent Capture, when combined with its intelligent recognition technology, is well positioned to support wider information management solutions. We believe that these core Capture capabilities, married with broad market reach, will place OpenText in a formidable position to challenge for market leadership position in Capture going forward."

And when considering emerging technologies such as Intelligent Capture, with the potential of a high reward, but also carrying some risk, the backing of a stable, growing market leader like OpenText might prove to be key to a successful implementation.

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