Exploring Intelligent Capture

MARKET LEADING TECHNOLOGY STACK DELIVERS ON PROMISE, AS OPENTEXT BREAKS DOWN BARRIERS THAT HAVE TRADITIONALLY HELD BACK ADOPTION

A look at how OpenText has positioned itself to be a leader in the still emerging market for Intelligent Capture technologies, by Ralph Gammon, Editor and Publisher, Document Imaging Report, the leading news publication in the capture space.

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, in a recent study by AIIM, 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 figures were among the highest ROI rates ever reported—“for capture projects, or any other ECM investments.”

This almost certainly has something to do with the recent introduction of intelligent capture methodologies into the market. While automated capture of data from structured documents like medical claims and tax forms, has been in relatively widespread use for close to 20 years, intelligent capture like auto-classification and automated extraction from unstructured documents—such as contracts and other complex forms—has only recently started to show up in end user implementations. And some of the results have been impressive!

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 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.

The Minnesota Dept. of Revenue has had similar success utilizing intelligent recognition to help it define more than 800 document types related to business tax returns. The technology is used to determine if a return is complete, and then, depending on the contents, route the return to the appropriate workflow queue. This application was part of a larger technology implementation that produced more than $1 million in cost savings.

Despite examples of impressive savings and ROIs, the numbers from AIIM’s 2016 report entitled “Paper Free: Are we there yet?” indicated that intelligent capture is still underutilized in the market. Only 10% of users surveyed for the report indicated that they had implemented the top level of capture technology described in the survey: “in conjunction with adaptive, intelligent processes,” and 60% seemed to be using no automated capture at all. (See Graphic from that report on th next pages.)

Despite these obvious benefits, why were adoption rates of advanced capture so low? Well, it’s certainly not because users don’t recognize the benefits. In a 2019 AIIM Industry Report, 70% of
organizations surveyed said that intelligent capture was critical to their digital transformation strategy. 

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

- Intelligent capture hasn’t yet 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 intelligent capture.

**Putting the Pieces in Place for Success**

OpenText is working to break down these barriers. In the past 12 years, the market-leading EIM ISV has made two major capture acquisitions. In 2008, it bought Captaris, a company best known for its fax server technology, but which had, a few years prior, acquired a leading German-based document capture software developer. More recently, OpenText acquired the Enterprise Content Division (ECD) of EMC, so it now owns the market-leading capture software formerly branded Captiva.

When combined with OpenText’s internal capture initiatives, 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 invoice capture for SAP environments.

“As business is digitally transformed, intelligent capture technology becomes increasingly important,” comments Mike Spang VP of research at Harvey
Spencer Associates, a leading capture market analyst firm. “Information management companies like OpenText have recognized this market trend and have added intelligent capture to their solution suite.”

Being able to offer this wide breadth of capture and information management software should make it easier to implement intelligent capture 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.

Today’s intelligent capture technology builds on this and primarily focuses on two areas: auto-classification and extraction from forms that 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-classification:** 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. 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.

- **Auto-extraction from forms with varying structures:** Historically, applying automated data capture successfully has been as much about forms design as it is about OCR. But, what about forms that an organization doesn’t have any control over? These can include invoices, contracts, explanations of benefits, and other types of documents that contain valuable data. Because of their varying structure, traditional template-based OCR applications are very difficult, if not impossible, to utilize. As a result, these documents have to be manually processed, which, due to their complexity, can require expensive skilled labor.

  **Advanced Capture Workflow:** OpenText’s intelligent capture solution is built on a proven platform and incorporates CaptureFlow Designer. This intuitive tool can be used to connect multiple capabilities and line of business applications in capture processes. These “CaptureFlows” can include 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 steps. 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 auto-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, like with any data capture operation, 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.

**A Look at OpenText’s Capture Stack**

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:

**CAPTURE SOLUTIONS**

- **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™. Through a toolkit, it can also be extended to incorporate mobile capture.
• **OpenText™ Core Capture**: A SaaS-based capture application first introduced in 2016. 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 being 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 meta data 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™ Business Center for SAP Solutions**: A capture solution for onboarding any type of document into SAP environments. It features pre-configured processes for managing sales orders, purchase orders, delivery notes, and HR documents. Like Vendor Invoice Management for SAP Solutions, Business Center for SAP Solutions runs within SAP environments, including the SAP cloud, and has been tested and approved by SAP.

**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 very 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.

• **Mobile Capture SDK**: A set of tools for embedding capture within mobile apps, such as those that might be offered by banks to their customers. It offers automated image clean-up and batch submission for integrating mobile capture with production applications. It features a very customizable UI.

• **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 entry**

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 market is lagging when it comes to intelligent capture adoption, OpenText still has a significant number of intelligent capture users, including a large number of Vendor Invoice Management for SAP Solutions customers through its partnership with SAP. So, while the market at large may be in the early adopter stage, OpenText’s customer base, and its support team, are more advanced than most.

- **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 all leading ECM platforms. OpenText can provide everything from the capture tools, to the batch management, to the OCR, to the 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.

**The OEM Opportunity for OpenText Capture**

In addition to being sold directly to its customer base, OpenText capture software is also 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 EHR 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 a leading university software provider’s capture offering. 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 service applications has expanded to include full-scale capture offerings, Artificial Intelligence, and solutions for cloud and mobile. Given the breadth of capture capabilities available to OEM partners and their 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 classification and extraction from all types of documents. And recently, signs have been pointing towards this investment paying off through increasing interest in the market. According to 2019 AIIM market study we quoted earlier, 64% of organizations indicated they were planning an intelligent capture project within the next year.

And OpenText’s wide breadth of technology and continued aggressive investment in R&D ($281.7 million in its fiscal 2017) 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 HSA’s Spang, “OpenText Intelligent Capture, when combined with OpenText’s intelligent recognition technology, are 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 the market leadership position in capture.” 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.

1. Paper-Free Progress: measuring outcomes, ©AIIM 2015

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