

White Paper

# The future of intelligent document capture



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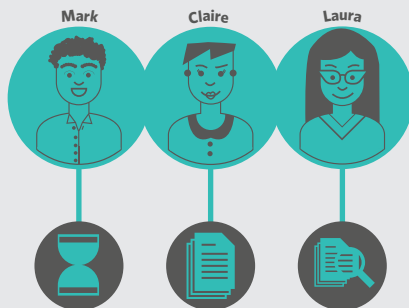
# Information: the lifeblood of any organization

## The battle for information

Information is the lifeblood of a business. It enables employees, from front-line customer service reps to chief executives, to take action and make good decisions. Often times important information already exists somewhere in the organization but the lack of a holistic document management strategy stops it from getting where it's needed. Although there are technologies that could help address these issues, they have yet to be fully utilized by most organizations.

### A classic story

Meet: Mark the customer, Claire the insurance agent, and Laura the claims adjuster. These three first met following Mark's accident. All three were unhappy with the claims process - and for good reasons. Mark did not receive his settlement check for what seemed like an eternity. Claire felt like a filing clerk. Laura was constantly searching for information, as well as waiting for police reports and damage estimates.



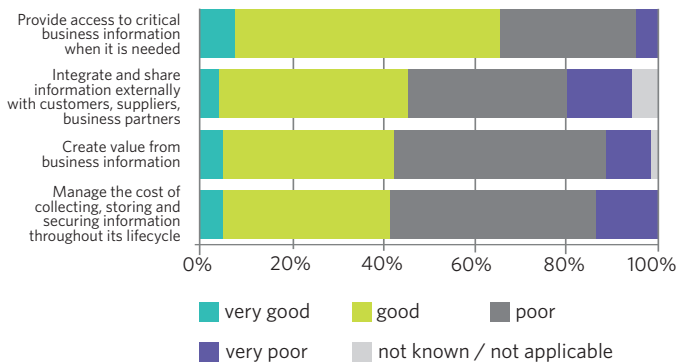
Document Imaging and Content Management technologies, which can make important business information available, have been around for decades. Most large and medium size businesses have implemented document management solutions. Yet there are still scores of employees who rely on ad-hoc processes to get the information they need. That is because information is often siloed or processes require manual interaction.

A paper published last year by the International Journal of Information Systems and Project Management showed that the struggle of deriving value from information still exists on a worldwide scale. When asked to rate a series of their company's information management capabilities, businesses indicated they were failing to realize the following key benefits:

- Providing access to critical business information
- Sharing information with customers, suppliers and other stakeholders
- Creating value from business information
- Managing the costs of storing and securing information

So what's holding back effective, efficient document capture?

## Current information management capability



(Managing enterprise information: meeting performance and conformance objectives in a changing information environment, International Journal of Information Systems and Project Management. 2014)

## The paper war continues

For over 30 years<sup>1</sup> we've been on the edge of the paperless office. Today there are some processes that are becoming paperless, but for all intents and purposes we are still dealing with a deluge of paper. Few organizations have reached their goal in reducing it, and even less have embraced a fully digital process. Without digitization paper remains a bottleneck.

The 2014 AIIM Paper Wars<sup>2</sup> survey disclosed that 44% of businesses are only 10% of the way towards the goal of going paperless. This includes 14% of businesses who haven't even started thinking about reducing paper processes - large organizations included.

Paper continues to be the largest hindrance for unlocking the power of documents. Paper documents are difficult for staff to access, and extracting content is cumbersome and time consuming.

While 68%<sup>3</sup> of respondents in the AIIM study agreed that business-at-the-speed-of-paper would be 'unacceptable in just a few years' time,' for many, that time is now.

Fortunately, today's scanning technologies are even more sophisticated. They enable the capture of paper documents wherever they may enter the organization. However, simply scanning is not enough. Organizations often fail to implement their paper-free initiatives because documents are placed in electronic archives as PDFs and in other forms. These digital archives are about as beneficial as a filing cabinet filled with paper files. No metadata is captured and no information is extracted.

Taking the information from a document and onboarding it into an organization as an indexed archive, or directly into the business process, ensures that the information is not trapped in the electronic world as it is on paper.

## Accident-prone

Mark has yet another accident (he swears it was the tree's fault!). This time he fills in a handy claims form, which he keeps in great supply in the car's glove box. He takes it to Claire, fully expecting to empty at least one pot of coffee while she's entering the data. However, Mark's insurer Dionysos has recently implemented a new intelligent capture solution. Claire scans the form and the data is uploaded to the system almost instantly. After clearing up some questions about the tree, Mark is on his way much faster than he anticipated and has to buy his own coffee.



<sup>1</sup> www.wired.com/2014/01/paperless-office-30-year-old-pipe-dream/ | <sup>2</sup> Paper Wars 2014, AIIM, 2014 | <sup>3</sup> Paper Wars 2014, AIIM, 2014

## Turn scanning into an asset

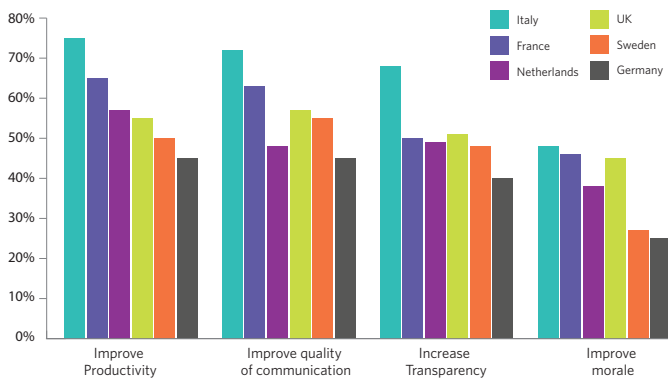
### Capture the advantage of digital documents

Information is a depreciating asset and often the data contained within documents to be input into business transactions has a finite shelf life. It is crucial that information from documents enters the organization quickly whether they arrive close to the point of service or otherwise. Promptly onboarding information calls for a range of scanning methodologies. The choice between centralized and distributed scanning often depends on what fits best with process design and current infrastructure.

Many organizations have adopted a centralized capture solution, like those having aligned their business processes to route mail directly to a centralized scan center. Incoming documents are routed to a mailroom, digitized and classified, and then forwarded directly to the relevant employee or business process.

On the other hand, banks and insurance companies, for example, have offices and agents dispersed globally. This makes transfers of physical documents difficult and expensive, if not impossible. Distributed scanning allows documents to be captured quickly and easily. It can also reduce storage cost and improve security by reducing the risk of unauthorized access to confidential paperwork.

### Proportion of respondents who agree that digital collaboration tools improve productivity, transparency, communication quality and morale



(Digital Collaboration, Deloitte, 2013)

A recent AIIM survey<sup>4</sup> revealed that for business processes such as loan origination or case management, distributed scanning is often a better fit. By placing capture devices on staff desktops or in departments, organizations are able to scan documents where the customer or document interaction takes place. This moves information into business processes sooner and can potentially reduce paper. While departmental and workgroup scanning has been possible for more than a decade, advanced scanning features on smaller scanners, improved software, and lower cost equipment make this option progressively more appealing.

Both methodologies - centralized and decentralized scanning - are often used simultaneously, depending on the business applications and volumes. Digital-mail delivery, Accounts Payable invoice capture and any other application in which paper documents need to be shared, are candidates for scanning automation. Digitization is one of the major dynamics of this age, with tangible benefits, which were highlighted in a research study by Deloitte<sup>5</sup>. This study proves that digitization increases productivity, quality of communication, transparency and even the morale of employees.

## Things speed up

Prior to implementing an automation solution, Claire spent much of her time manually collecting, filing, processing documents and inputting data. With the new solution, the police report was mailed to Dionysos, scanned in the mailroom, pertinent data was extracted and automatically updated Mark's case, and the file was placed in a case-management system. The damage estimate was faxed to Claire and she updated the system. Within a few minutes, all the information was available to Laura, who received an automatic notification of a status change. An email was also automatically sent to Mark. However, Claire also gave him a personal call to let him know the progress, as well as to ask him how his driving lessons were going.



<sup>4</sup> Over 50% of respondents use distributed capture as their "digital mailroom" solution. (Paper Wars 2014, AIIM, 2014) | <sup>5</sup> Digital Collaboration, Deloitte, 2013

## Web based capture to the rescue

To achieve the full benefits of distributed capture, browser-based applications can greatly simplify your infrastructure. Many browser applications have benefits that can apply to scanning software, allowing IT departments to maintain applications at the server level. Applications such as OCR can be centrally managed and even moved to 3rd-party cloud providers for more cost effective support, to reduce CPU and memory demands, in a hybrid or full cloud solution.

A browser-based interface allows every workstation in the office to be connected with the scanning solution, enabling every employee to capture documents, even those interacting with clients in the front office. Since the browser-based application is updated across every device, each person uses the same software version and training becomes straightforward as a result.

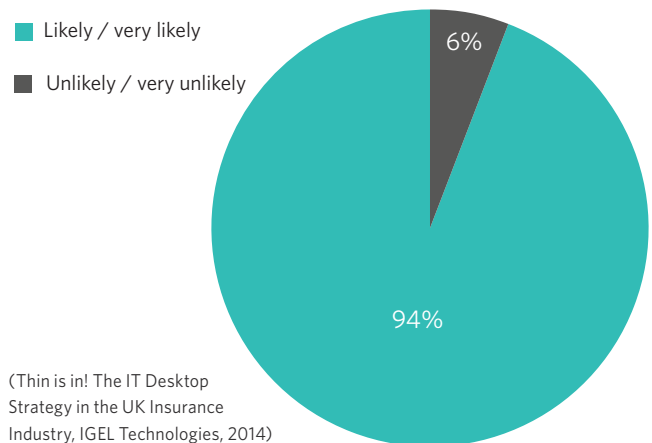
Browser-based scanning also facilitates process standardization, regulatory compliance and security by creating the same transactional audit trails and controlling access only to authorized personal.

Ideally, browser-based capture is integrated with your Line of Business (LOB) software with a simple 'scan button' embedded in your application. This way employees don't need to know anything about the capture software; the button simply allows documents and information to be scanned directly into the business application, saving both time and training costs. This type of thin client software application is on the rise, especially in the insurance industry. In fact the results from a study by the UK Insurance Industry<sup>6</sup> last year clearly demonstrate that there is an overwhelming commitment to increase usage of thin client software in this sector. On reflection, that is hardly surprising. The benefits of flexibility, security and ease of deployment make sound sense.

## The benefits of thin and zero clients well understood



## Industry committed to more use of thin and zero clients



## No time for coffee

Under the terms of his policy, Mark is reimbursed for the cost of a rental car while his car is being repaired. He decides to drop by Claire's office with the rental invoice and have a cup of coffee. Claire enters the invoice information into the system via a scanner near her desk. Mark is happy the claim has gone smoothly so far and thanks Claire for a job well done, but again, there's not enough time for coffee.



<sup>6</sup> Thin is in! The IT Desktop Strategy in the UK Insurance Industry, IGEL Technologies, 2014

## Embracing channels and facilitating workflows

### A multitude of communication channels

Multi-channel communication between businesses and consumers is the norm today and these channels are constantly evolving and expanding. By integrating these new channels into enterprise-wide processes, organizations can achieve a consistent, comprehensive view of all available information, improve processes, lower IT costs and gain customer loyalty.

Business information entering an organization solely on paper is a thing of the past. In addition to paper documents, most organizations use faxes and electronic documents attached to emails to share information.

The lack of enterprise-wide adoption of communication channels across entire organizations has both cost and usability implications. Duplicate departmental systems result in redundant IT costs and information trapped in local silos. The diverse data structures and archives cause miscommunication, duplicate work by employees and multiple copies of the same document.

### Status update

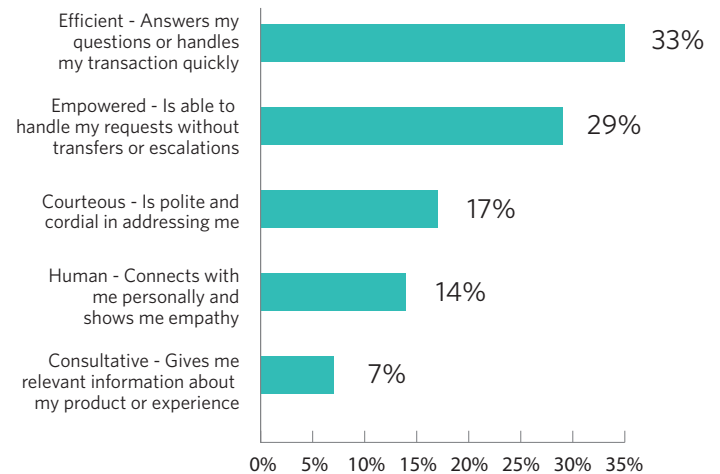
The new employee who estimated the repair cost on Mark's car missed some of the damage, so the garage faxed an updated estimate to Claire. Previously, faxes weren't integrated into the capture system and arrived at the mercy of those in the office. This time, the system automatically routed it to an OCR and classification process, and the information workflow then updated the system for Claire's review. Again, Laura was automatically notified of the status change.



Consumers now use up to 9 different communication channels to contact companies<sup>7</sup>. Adding new communication channels on top of already disparate legacy systems can wreak havoc on LOB systems and archives designed for sequential steps of processing. To close the gaps, employees must collect data from these new sources and place it into the workflow. Or they have to manually route data to the person or department best suited to manage it.

On top of that, as a recent survey by Ebiquity<sup>8</sup> confirms, the two most important attributes of customer service are speed and the ability to handle the interactions without transfers or escalation. In today's service economy the expectation is for accuracy and responsiveness. Consumers demand a better customer experience - or they go elsewhere.

### Which one of the following is the most important attribute of a successful customer service professional?



(2014 Global Customer Service Barometer, study by Ebiquity, sponsored by American Express, 2014)

<sup>7</sup> State of the CEM Market, Aberdeen Group, 2014. | <sup>8</sup> 2014 Global Customer Service Barometer, study by Ebiquity, sponsored by American Express, 2014.

Integrating the vast array of data and communication channels enables employees and customer service professionals to formulate a 360° view of customers. They can quickly find the information needed to react to customer requests accurately in the desired channel. Both are essential and cost effective in an age when it costs 6-7 times more to acquire a new customer than to keep an existing one<sup>9</sup>.

### A smarter way to handle mundane tasks

Depending on specific business goals, there is a wide spectrum of automation possibilities. For simple, high-volume processes, many companies use fully automated, end-to-end solutions where staff only manage exceptions. For complex or lower volume situations, partial automation of the repetitive steps organizes and prepares information to help staff in further processing. This not only helps them to be more productive but also, by eliminating the mundane tasks, keeps them more engaged.

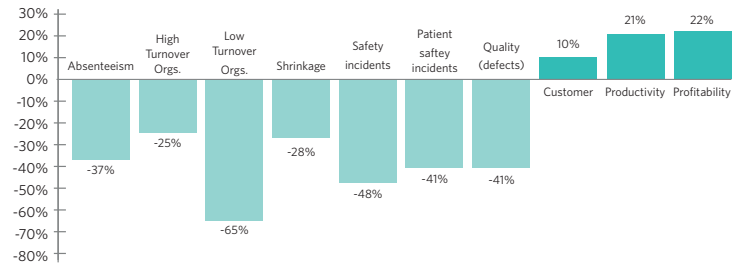
Linking incoming documents to systems of record and systems of engagement is essential to processing information intelligently. For example, a customer's address change request should be identified as such in order to get the right attention. To reduce costs and increase speed, an organization should automate simple interactions.

The first rung on the ladder of automation is on-ramping information into a business process. There are many examples, but often agents find themselves manually working around silos of information by manually entering data from one system to another, or by manually checking policy validity when processing a claim.

Removing these simple but repetitive manual tasks leaves employees more time to focus on more complex tasks and also serves to give employees a higher-level of engagement in their work. This is particularly important in contact centers where agent turnover is a constant struggle, and also in the insurance industry where attrition is both a huge cost and a loss in valuable

experience. As the Gallup findings shown here illustrate, taking such action can result in an increase in business profitability of 22% and also a 10% increase in customer metrics - and that's a substantial benefit that can't be ignored.

### Difference between top and bottom engagement quartile Meta-Analysis: Outcomes



(Engagement at work: its effect on performance continues in tough economic times, Gallup, 2013)

## Automatic checks

Previously Claire had to use a separate system to check if Mark's policy was up to date and valid for this type of accident. With the new solution, once the required data regarding the claim is entered the policy status is checked automatically.



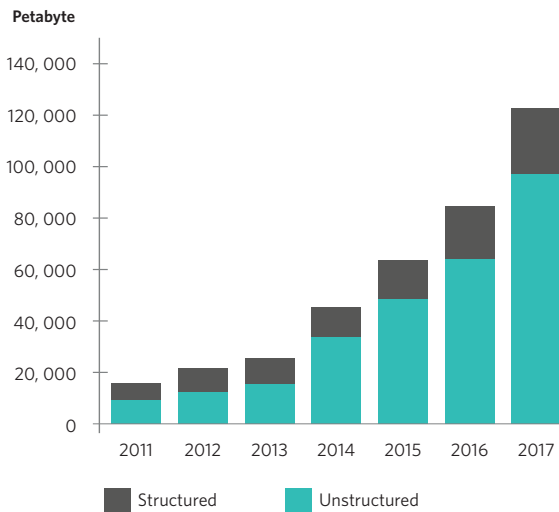
<sup>9</sup> 18 Customer Facts Marketers Can't Ignore, February 25, 2013, Bain and Company



## Automating classification and extraction

To understand the type of information that a document might hold, it must first be classified to identify if it is an application, claim, invoice, address change request, and so on. Although structured data can be handled through traditional methods, the unpredictable nature of unstructured data requires a different approach. That's where Artificial Intelligence (AI) saves the day and makes classification and extraction more efficient and cost-effective.

Structured forms are highly predictable and the data that needs to be extracted is in a pre-defined position. By programming rules and keywords or by using a barcode, the solution knows what type of information is available on the document and where. The data is extracted using Optical Character Recognition (OCR). Yet, for each new data or document variation, costly new rules have to be added with increased amounts of validation to ensure information is not falsely identified.



(Structured Versus Unstructured Data: The Balance of Power Continues to Shift, IDC, 2014)

It's also possible to automate the data extraction for semi-structured documents like non-standardized invoices. Software packages focused on invoice processing can now spot the typical elements of an invoice, like customer name, customer number, invoice number and amount with reasonable confidence.

Extracting completely unstructured information is complicated. The document could contain any combination of relevant business data, not to mention spelling errors. This can lead to too many variations for rules-based classification methods - and in a fast moving business world, programming becomes outdated quickly because keywords related to a process are dynamic.

An AI-based solution analyzes text and understands the nature of the communication, as well as which data elements are relevant to the business process, just like a human would. Even with ever-increasing variations of communications and documents, AI can match a broad range of inputs with the relevant process. The dramatic and escalating rise in the volume of unstructured data in comparison with structured data is shown in the chart in the left column. It clearly demonstrates the importance of ensuring that organizations deal with the growing volume of unstructured data today, not tomorrow.

## A quick update

While Claire and Laura are working on his case, Mark finds that there have been some privacy breaches with his current email provider. He decides this is the right time to open a new account. He sends an email to inform Claire of the change. Although she is out of the office, the intelligent capture solution recognizes the purpose of Mark's message and changes his preferred email in both the claims and policy suite at Dionysos. The switch was just in time as Laura issued an update on Mark's case only minutes later that he would have otherwise missed.



## From records management to dynamic case management

As customer expectations continue to rise and the amount of communication channels grow, creating successful customer interactions is becoming increasingly complex. Companies looking to forge a close relationship with their customers must enable employees to assist customers in their transactions by presenting a sufficient overview of the client's journey, and deliver consistent messaging and transactional capability to customers across all channels. Understanding, organizing and providing this information, which often comes from numerous systems, is onerous and requires a step forward in process automation.

To meet customer expectations, many companies have already standardized and automated the majority of their routine 'static' incoming document processing and are now creating solutions to support dynamic processes. For more complex transactions, Smart Process Applications (SPA), which are focused on 'human-centric' processes, provide automation to help people complete processes faster and more accurately, and process the customer interactions involved faster, all of which offers better customer experience.

Often communications and documents between customers and other stakeholders can be phrased many different ways and can contain spelling and grammar mistakes. Rather than searching for keywords, an AI-based solution can use natural language understanding to reliably interpret the nature of a correspondent's communication, regardless of spelling errors or colloquialisms. Additionally, a self-learning solution can analyze thousands of cases to understand the ways to classify different types of communication.

Supported by artificial intelligence, dynamic case management is still evolving. It is leading the way in shaping the next level of machine support of human-centric processes. Future solutions will increase the amount of knowledge available to

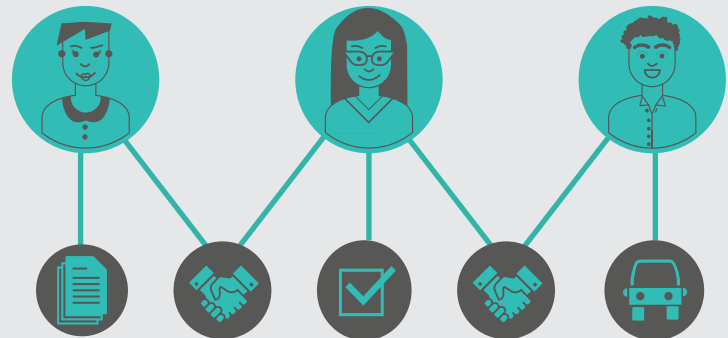
every department in an organization to improve outcomes from top to bottom, including smarter decision making, workforce productivity, and of course, customer satisfaction and loyalty.

## A final thought

Adopting intelligent solutions for Document Capture unlocks the power of business information, which is the lifeblood of your organization. It's a journey that requires multiple steps, but successfully navigating it reaps significant rewards. There is a solution available to address the specific needs of each business, which vary based on company size, level of automation and market needs. Don't delay to investigate.

## What a result

In the end, Mark's case was processed much faster and without the stress levels associated with using the previous system. The payment from the insurance company arrived at the body shop soon after the repair was finished, Claire didn't have to worry about keeping any paper documents around for compliance purposes and Laura was able to quickly analyze information as it came in to make a decision rather than chasing it as she had before.



**Want to learn more?**

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