



WHY DATA CAPTURE AND AUTOMATION ARE KEY TO DIGITAL TRANSFORMATION

How Advanced Document Capture Can Improve Business Outcomes

A Frost & Sullivan White Paper

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INTRODUCTION

One of the easiest and most effective ways to embrace digital business is to rethink how you manage content. After all, whether we're talking about contracts or marketing collateral, emails or instant messages, the information contained in common business documents is vital to companies across all industries, sizes and regions. You simply cannot run without it.

That's especially true today because content fits into the broader effort around Digital Business Automation (DBA), which is transforming the way work gets done. Using a range of strategies and technology tools, including Robotic Process Automation (RPA), data capture and cognitive intelligence, modern businesses are leveraging machine learning, artificial intelligence, bots and advanced analytics to improve everything from the customer experience to enterprise-resource planning and supply-chain management, workforce management, sales, marketing and more. Along the way, they are increasing productivity, revenues and customer satisfaction.



The Challenge of Unstructured Information

In the digital age, many organizations struggle to leverage the unstructured information contained within documents to boost productivity, streamline processes and automate the ways in which that data gets stored, accessed and used throughout the organization. Once the data has been identified, it needs to be captured, cataloged and handed off to whatever applications or end users need it to complete or continue the relevant business processes, which might result in yet more data.

It's relatively simple to identify, extract and leverage the data that resides in structured systems, such as databases and ERP, CRM and SCM applications. But it's much more difficult to parse unstructured content and then turn it into usable information—especially in an automated environment. Add photographs and graphic images—not to mention an ever-expanding list of contributors, from mobile workers to connected devices and the Internet of Things—and the challenge becomes immense.

This paper discusses how advanced document capture can help companies find and extract the information they need within the terabytes of text within their servers (and, in some cases, walls). The goal: unlock the valuable information locked inside PDFs, emails, faxes and other business documents and then use it to drive productivity, shrink cycle times, improve decision making and boost the bottom line.



DIGITAL TRANSFORMATION: CONFRONTING A TOP BUSINESS CHALLENGE

For years, companies have leveraged business automation to increase efficiency, maximize speed and deliver consistent processes across business operations. The goal, at least initially, was to reduce costs through higher productivity and streamlined processes. But automation is now taking its rightful place in digital transformation—a trend that can help companies scale common, repetitive operations, as well as jump-start revenue-impacting processes such as the customer experience, just-in-time supply chains, new-employee recruiting and onboarding, and sales and marketing campaigns.

Frost & Sullivan research shows that companies recognize the business and operational benefits of automating business processes like data capture: higher productivity, leading to higher revenues. In a recent survey of almost 2,000 global IT decision makers:

- 72% have already invested in technology to drive and improve enterprise content and business process management as they try to reduce operational costs and improve the customer experience and their digital presence.

- Almost a quarter of IT decision makers say that automation is one of the top technologies they use to reduce costs and positively impact the bottom line.

Still, about 20% of respondents admit that effectively automating business processes is a top challenge for their organization.

To address that challenge, many companies are putting the spotlight on how they manage information within the organization. This requires a constant back-and-forth between data capture and process automation to ensure that the right information is identified, extracted and then delivered to applications as needed. Automation excels at increasing the amount and quality of the routine work an organization can process, which is especially important as companies continue to try to “do more with less.” Being able to jump on new offerings, meet changes in customer demand and handle seasonal staffing fluctuations allows businesses to remain competitive; new customer experiences can be digitally replicated thousands of times over, saving money and boosting productivity.

Automated processing improves customer service, drives competitiveness, increases productivity, helps companies meet compliance requirements and lowers costs.

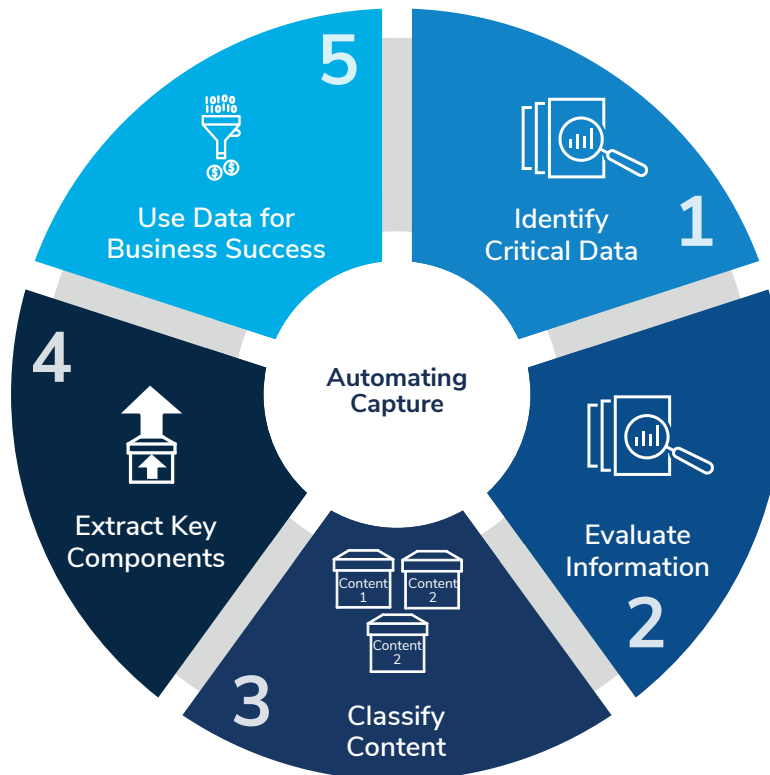
By automating data capture, companies can see a number of other benefits, too: flexibility and scalability, a consistent user experience and the ability to attain and then leverage data-driven insights. Companies that pay special attention to data capture ensure that decisions are based on accurate information, all the while speeding the time it takes to make them and improving their impact on the bottom line. That increases corporate agility, allowing organizations to quickly respond to market changes and new customer demands, which ensures they stay competitive in an always-changing, fast-moving world.



FIVE WAYS DATA CAPTURE AND AUTOMATION ARE CHANGING THE WAY WORK GETS DONE

Tapping into previously unused data to ensure everyone has access to the right information when they need it—while maintaining privacy and security, even in the face of new regulations such as GDPR—is critical for staying competitive in today’s always-on world. It also speeds up common processes, whether they are internal or customer-facing, thereby driving revenues and making employees more productive. And it increases business agility, allowing companies to pivot on a dime as market realities change. Companies that do not make data capture a priority risk getting left behind in the months and years to come.

Automating the capture of information from files as soon as they enter the enterprise allows companies to identify relevant information at a speed unmatched by human beings, rate the value and purpose of the data, classify business documents according to pre-set parameters, quickly and accurately extract important information for business users and applications, and use the resulting analytics to improve business outcomes.



USING DATA CAPTURE TO IMPROVE OUTCOMES: WHERE TO START?

Frost & Sullivan research shows that companies usually start their automation efforts to improve the customer experience. But, in fact, automating data capture can streamline a range of business processes, resulting in much higher revenues per employee, regardless of the industry or size of the organization involved.

The key to successful business automation efforts is to focus on how people actually work and then identify the parts of each process that are repetitive and mundane. Those are the areas that are ripe for automation, freeing up human beings to focus on strategic activities and thereby having a doubly positive impact on the bottom line: machines speed routine processes, allowing the company to process more sales and speed times to completion, while humans have more time to spend on the value-add tasks that make them so valuable to an organization.

Customer Facing: Accelerate business processes by quickly and accurately extracting important information from complex, highly unstructured business documents to improve customer experience; increase customer satisfaction scores and reduce costs.

Automation is often initially used to improve customer-facing processes that may require human input only 10 to 20% of the time.

LOAN APPLICATIONS

Loan, line of credit and mortgage applications all require a consistent series of steps, supported by reams of data and paperwork. Some of the information is located in structured systems, but much of it arrives in the form of titles, appraisals, bills of sale, emails, letters of employment and other documents. By extracting the relevant information from a wide variety of unstructured sources, companies can automate much of the approval process, leaving only exceptions to be reviewed by human employees. By shrinking approval times and the amount of back-and-forth in the approval process, companies can make more loans (and more revenues) and increase customer satisfaction. Meanwhile, their employees can deliver maximum value by focusing on complex, one-off tasks and outcomes.

CONTRACT NEGOTIATION

Contracts can benefit measurably from an automated process. By extracting content from common contract documents, as well as supporting emails, letters and even telephone recordings and web services, companies can streamline the process that gets them from negotiation to signature. By combining data capture and robotic process automation (RPA), companies can extract the relevant information from a variety of contract sources, turn it into structured data that can be used by applications and web services to move negotiations forward, and then be turned back into unstructured language in the form of revised and updated contracts that can be tracked and managed for signature, compliance and fulfillment.

PAY ATTENTION TO HOW AND WHEN YOU CAPTURE INFORMATION:

The process first involves identifying and classifying documents, including contracts, applications, tax returns, sales orders, emails, invoices, resumes and leases. That's followed by analysis and categorization so that the systems know what the content means, how it fits into the broader business picture and where it belongs therein. And, finally, once the content is extracted, it's sent on its way or flagged for review as needed:

1. Capture relevant data from a wide variety of sources: fax, emails, scans, images, mobile apps, web services, repositories, etc.
2. Transform the data so that it is usable: OCR, convert, enhance, split, merge, analyze, apply rules, cleanse, redact, imprint, validate, etc.
3. Deliver the data to automated systems for use: repositories, applications, mobile apps, analytics, BPM, web services, RPA, etc. people can do manually.

ROBOTIC PROCESS AUTOMATION IS THE NEXT BIG THING IN DATA CAPTURE

Robotic Process Automation (RPA) employs software robots (a.k.a. “bots”) to use data, analytics and AI to automate common processes. Many companies first deploy RPA in the contact center and then, based on those positive results, throughout the organization. Here’s why:

- **Speed.** RPA accelerates business processes, improving productivity and the customer experience.
- **Personalization.** RPA, especially in combination with other automation tech such as artificial intelligence (AI), lets companies customize each and every customer interaction, leading to better outcomes and higher sales.
- **Efficiency.** By letting robots take over common rote, predictable tasks, humans can use their higher-level thinking to deliver real value to the organization.
- **Quality.** Robots reduce error rates associated with manual data entry.
- **Security.** By automating data capture, companies ensure all information is protected against a variety of cyber and human threats.
- **Scale.** In the right use cases, processes are easy to scale, exceeding the limits of what people can do manually.

Employee Facing: Automate and streamline business processes across the enterprise to increase productivity and efficiency, drive higher revenue per employee, replace repetitive and mundane processes, and redeploy knowledge workers to focus on value-added tasks.

Automation also serves internal processes, making it easier and more cost effective for companies to do everything from recruiting and onboarding new employees to integrating sales and supply-chain management to drive efficiencies in the manufacturing process.

FINDING TALENT

For instance, companies can automate the process of reviewing resumes as they come into the organization for a given job opening, allowing them to sort through all applicants and send only those that meet the requirements to be reviewed by the HR team. They can then manage email and written communications throughout the interview and decision process, pulling out the relevant content hidden within unstructured documents to better analyze applicants and make more effective hiring decisions.



SUPPLY CHAIN MANAGEMENT

Suppliers, retailers and manufacturing firms can go beyond automating basic structured programs (such as SCM and CRM applications) by leveraging capture capabilities to extract relevant data from emails, invoices and contracts as they attempt to better manage their supply chains. That will ensure that as they ramp up or down on everything from raw materials to human resources, companies know not just what orders have been placed within their structured systems, but also what production requirements are coming down the pike.

WHAT TO LOOK FOR IN ANY DATA CAPTURE SOLUTION

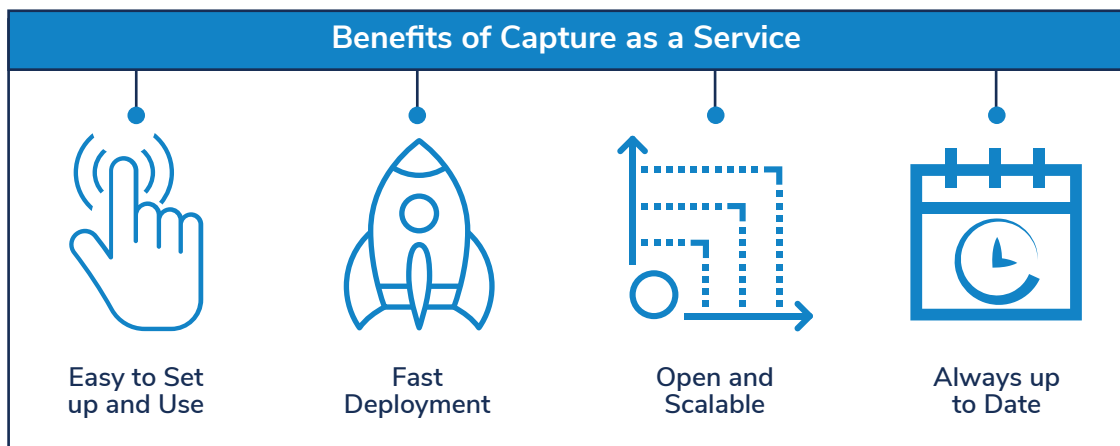
Of course, simply capturing information isn't enough to deliver benefits in any use case. Automation requires a clear understanding of what processes are ripe for improvement by adding unstructured data and then ensuring that the relevant applications and services (and, sometimes, human beings) can access the new information, act on it and provide meaningful, actionable next steps or completion.

THREE CRITICAL COMPONENTS

To ensure they achieve a successful program, companies should look for an integrated, single source, end-to-end solution that will let companies connect and automate all elements of a Digital Business Automation initiative, including tasks, workflow, content and decision making.

This requires a three-pronged approach.

- 1. Cognitive Capture:** Cognitive capabilities can advance data extraction and leverage machine learning to drive automated expertise, making the system intelligent and able to change along with context and experience. This is the “special sauce” that makes automated data capture significantly more valuable than data that is manually identified and extracted by providing context for the information and then leveraging that insight to ensure the data is used to maximum effect throughout the organization.
- 2. Platform-based Solution:** Your chosen tool should offer a full range of capture capabilities as well as all the other elements of a full Digital Business Automation solution. This includes tasks (through RPA), content (via a robust content management system), workflow (to provide visibility and consistency to thousands of human processes), and decision making (to increase speed, accuracy and effectiveness). Ease of use is also important so that non-technical users can customize processes using an intuitive, flexible UI. Look for a solution that supports multiple content formats (including web services), includes advanced search capabilities and offers access to deep analytics and streamlined reporting to enable discovery and collaboration.
- 3. Integration:** Make sure your data capture and automation solution can integrate with your existing (and future) line-of-business applications. It's critical that your systems can take captured data and send it to all relevant applications in a usable format. That is the key to automation that will save time, increase productivity, speed decisions and drive efficiency—all while reducing costs.



MITIGATING THE RISKS

As with any new technology, data capture and automation present risk. Unexpected costs (specifically around storage) can undo the savings that automation delivers. Companies should pay close attention to how they plan to store and use content. Here, a cloud-based solution can be particularly effective.

Keeping data in silos risks data loss and repetition, and it can significantly slow cycle and reaction times, so it's critical to have an end-to-end solution that treats all corporate data holistically. Siloed data also impacts data integrity, decision making (since not everyone is on the same page) and insights. Enterprises also risk potential compliance and security issues, as well as simple mistakes.

Finally, don't ignore the need for robust management tools. Like any transformative technology, the process of automating data capture can be complex. Make sure you partner with a provider that understands the value and challenges associated with cognitive capture and that has experience helping companies similar to yours.

WHAT TO LOOK FOR IN A PROVIDER

A variety of deployment models (cloud, on-premises, hybrid)

Market leadership

Global presence, service and support

Roadmap to the future

CONCLUSION

As more companies embrace digital transformation across the organization, business automation is changing how work gets done. By automating key processes to increase the speed, accuracy and cost-effectiveness of their business operations, companies can improve the customer experience and drive employee productivity. A critical component of any automation initiative revolves around data capture: identifying and extracting data from unstructured sources to feed into automated processes that speed everything from approving loan applications and mortgage contracts to onboarding new employees and meeting regulatory compliance. As they improve the very way they do business, companies will also see higher customer satisfaction and revenues-per-employee.

NEXT STEPS 

Schedule a meeting with our global team to experience our thought leadership and to integrate your ideas, opportunities and challenges into the discussion.



Interested in learning more about the topics covered in this white paper? Call us at 877.GoFrost and reference the paper you're interested in. We'll have an analyst get in touch with you.



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SILICON VALLEY

Santa Clara, CA 95054

Tel 650.475.4500

Fax 650.475.1571

SAN ANTONIO

7550 West Interstate 10

Suite 400

San Antonio, TX 78229

Tel 210.348.1000

Fax 210.348.1003

LONDON

Floor 3 - Building 5,

Chiswick Business Park 566

Chiswick High Road

London W4 5YF

Tel +44 (0)20 8996 8500

Fax +44 (0)20 8994 1389

MELANIE TUREK

Vice President

Enterprise Communications

Frost & Sullivan

P: 970.871.6110

E: melanie.turek@frost.com

877.GoFrost

myfrost@frost.com

www.frost.com

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3211 Scott Blvd

Santa Clara CA, 95054