

AUTOMATING DIVISION ORDER PROCESSING

A GUIDE TO SUCESSFUL IMPLEMENTATION OF DATA CAPTURE AND RPA



Contents

Introduction
The Challenge of Unstructured Information 3
So what is a DO anyway 4
Why are DO's so complicated 4
What does a division order analyst do? 4
Five ways data capture and automation are changing the way work gets done 5
Using data capture to improve outcomes: Where to start?
Customer Facing 6
Employee Facing7
What to look for in any data capture solution
Three critical components 8
The benefits of capture as a service9
Mitigating Risks
Data Capture, RPA and Division Orders 10
Summary 11

Introduction

One of the easiest and most effective ways to embrace digital business is to rethink how you acquire and manage your content. Whether we're talking about contracts or invoices, orders or emails, the information contained in all business documents is vital to companies across all industries, sizes and regions. It's impossible to run without that information.

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

The Challenge of Unstructured Information

In this 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, verified 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 extract 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 challenge becomes huge. This whitepaper discusses how advanced document capture and RPA can help companies find and extract the information they need from Division Orders. The goal: unlock the valuable information locked inside those documents and then use it reduce processing times, decrease cost and speed up access to that essential data.

So what is a DO anyway?

The Division Order component is essential for all E&P Companies. A Division Order ("DO's"), also known as a Division of Interest (DOI), is the document that details the proportional ownership of produced minerals, including oil, liquids, natural gas, etc., in a well or unitized area of production. In essence, the DO is the document laying out everyone's piece of the production "pie".

Why are DO's so complicated?

Division Orders are cross-referenced to Title Opinions, Unit Designations, and other information. This verification process ensures that landowners receive their proper share of production.

The foundation of a proper Division Order is the Interest Calculation. The calculation can be quite complex. As a producers you will follow the final calculation to make payments in the correct amount and to the right people.

What does a division order analyst do?

Oil wells, coal mines, and natural gas pipelines may have many different owners. And each owner may have a different share of the costs, and the profits. A huge portion of your time is spent entering the data from division orders and then matching the parties to entities in your internal systems.

The accurate and timely gathering, checking and double checking of that data is essential. This data is often keyed, checked and analyzed from spreadsheets. Because a single DO can contain hundreds of records for each interest type, each record representing each party the sheer volume of the data to be captured and checked represents not only an enormous task but also a enormous risk in the form of keying errors and mismatching of parties.

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 is critical for staying competitive in today's online and always-on world. It also speeds up common processes, whether they are internal or customer-facing, thereby driving revenues and making employees more productive. It increases business agility, allowing companies to pivot on a dime as the markets within which they operate 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 documents as soon as they enter the organization 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?

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.

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:

- Capture relevant data from a wide variety of sources: fax, emails, scans, images, mobile apps, web services, repositories, etc.
- Transform the data so that it is usable: OCR, convert, enhance, split, merge, analyze, apply rules, cleanse, redact, imprint, validate, etc.
- 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.

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 fulfilment.

Employee Facing

Automate business processes 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 on boarding new employees to integrating sales and supply-chain management to drive efficiencies in the manufacturing process.

Supply Chain Management

Suppliers, retailers and manufacturers 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 road.

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.

The benefits of capture as a service









Always up to date

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. Companies 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.



Data Capture, RPA and Division Orders

It should be clear how data capture and RPA as tools for automation, can be applied to most business processes where fast and reliable acquisition of data from various sources is required. Division Orders are no exception. In fact, because of the type of data you require from division orders and the way in which that data is presented, they are a serious contender to be one of the most successful implementations of automation any E&P company could undertake.

Division Orders are crammed full of mostly numeric data which always represents the highest success rate for OCR due to the very limited number of options an OCR engine has to choose from for each character. Combine that with a relatively simple document structure and we can already see how data capture technology can easily identify a DO then locate and successfully OCR the data required. OCR technology is not infallible so captured data must be checked. It is important that any data capture solution can apply data format and data type validation but also present suspect data to an operator in an efficient way.

Data Capture successfully implemented is however only half of the battle won. Each interest entry on a DO relates to a single party. To process the interest data each party as it is expressed on the DO needs to be matched to a party as it is know within your organization. This is where RPA and Machine Learning save the day.

Let's say that a party on the DO is expressed as "Family Robinson Trust". In your land admin systems you know that party as "Robinson Family". The interest entry on the DO must be matched and in this instance its not an identical match so you have to manually apply this match. This alone represents a huge labor overhead but also a huge opportunity for savings using RPA and Machine Learning.

Combining these automation technologies will allow any E&P company huge experience game changing reductions in the labor associated with processing Division Orders. In our experience we have seen the processing of Division Orders reduced from DAYS to just MINUTES!

These kinds of saving justify the cost of such solutions in VERY short order with the added benefit of being a pathway to adoption of those same solution across the organization.

Summary

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 and in particular cutting those royalty checks for the correct amount and sending them to the right parties! As they improve the very way they do business, companies will also see higher customer satisfaction and revenues-per-employee.

