

How Cognitive Automation Can Take Your RPA Implementation to the Next Level





Introduction

RPA has delivered major benefits to companies across industries from healthcare to financial services. It can multiply the productivity of the human workforce, allowing companies to be more profitable, nimble and innovative. Adopting RPA has allowed companies to gain significant advantage over their competitors, but as implementations mature and slower competitors catch up, many are looking towards the next step.

THE POWER OF COGNITIVE AUTOMATION

RPA delivers significant benefits by automating well defined tasks and operating with structured data. However, 80% of all data is unstructured. Traditional RPA has difficulty processing common forms of data such as natural language, text, images and web content. Cognitive automation is a subset of AI that more closely emulates human abilities. It allows automation solutions to perform tasks and process unstructured data that traditional RPA can't handle. This massively expands the capabilities of RPA, allowing companies to implement automation in more areas and see significant productivity gains.

This paper will use specific industry examples to further explore the limitations of traditional RPA and how cognitive automation can address those limitations.

Why RPA Is Only the Beginning of Automation

According to a recent survey, approximately 30% of human work is spent on highly repeatable low-level tasks.¹ These tasks are optimal targets for automation and most mature implementations have fully or partially automated as many of these tasks as is feasible. Implementing these solutions has already provided substantial gains and has been lauded by 98% of IT business leaders as being essential to driving business benefits.¹

However, traditional RPA solutions are designed to perform simple, repetitive tasks reliably and efficiently. Although they can deliver significant benefits, they are unable to manage unstructured data and perform more complicated actions. In order to continue to improve automation implementations and see greater gains, companies must begin to look beyond low hanging fruit and utilize newer more powerful cognitive technologies.

THE IMPORTANCE OF DOCUMENT PROCESSING

One of the most business critical processes for almost every company is document processing. Manually analyzing unstructured data in the form of documents can be costly, time consuming and a major bottleneck for automation. One recent survey estimated that 25% of companies spend \$10 or more per invoice processed. 1 The ability to automate tasks like this can have a dramatic impact on a company's efficiency and ability to innovate.

Unstructured vs. Structured Data

Traditional RPA generally analyzes or manipulates structured data. This means that the data is ordered and labeled in ways that make it easily readable by machines. Examples of this include online input forms or data generated by other computers or automated systems. Unstructured data includes everything else, such as text, images, PDFs, scanned documents, natural language input or web content. This data is incredibly difficult for automated systems to parse and traditional RPA solutions require that unstructured data be converted to structured data by a human user.

The inability to use unstructured data is a major bottleneck in many RPA solutions and significantly limits the number of tasks that they can perform. Potential inputs that most RPA solutions cannot parse include paper documents such as invoices, customer emails and verbal language. This makes it impossible for automation to be used in a wide range of front office and back office business processes. In order to overcome these issues, companies must look to cognitive automation.

Traditional RPA isn't enough.

Automating simple tasks is only part of the equation. Implementing a solution that can manage unstructured data is the future of successful business automation.

[1] Wiggins, P. D. (2018, February 05). Metric of the Month: AP Cost Per Invoice Process. Retrieved from http://www.cfo.com/expense-management/2018/02/metric-month-accounts-payable-cost/

How Cognitive Automation Makes RPA Smarter

Cognitive automation is a major step forward in the automation journey, allowing solutions to leverage AI technology to automate tasks that before could only be performed by human workers. One of the most important new abilities of cognitive automation is processing unstructured data as it unlocks the ability to automate new business processes.

WHAT IS COGNITIVE AUTOMATION?

Cognitive Automation encompasses any automation technology that seeks to emulate human judgement. This can include a wide range of skills and capabilities such as machine learning, natural language processing, speech synthesis, computer vision and analytics. The key difference between traditional RPA and cognitive automation is that cognitive solutions can manage significantly more dynamic problems and input. Much like a human worker, cognitive tools can adapt to new situations, parse data in novel formats and make rapid intelligent decisions.

Most RPA solutions rely on human workers to sort through unstructured data and input it into the correct fields in the system. By utilizing advanced AI techniques, new solutions can now read unstructured documents and provide human like decision making, without human input. This dramatically improves the efficiency of automation and can provide substantial new benefits to companies in a diverse range of industries.

1

Cognitive Automation in Financial Services

Optimizing efficiency, ensuring compliance, and minimizing fraud are the core foci for many financial services organizations. Automated solutions have significant potential to improve performance in all of these areas, helping the industry lower costs and improve customer satisfaction. However, unstructured data is very prevalent in the field, making it difficult to automate every part of business processes.

In order to ensure that companies are getting the most out of their automation implementation, it is critical that financial services companies implement cognitive solutions. These tools allow companies to unify legacy systems, fully automate repetitive processing and connect to a wide range of data sources to better understand the customer and transaction. This makes it easier to automatically identify fraud, increase efficiency, and improve compliance.

Cognitive Automation in Healthcare

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Healthcare data is often stored in unstructured and unstandardized formats, making it difficult to manage the patient experience –including, transfer data to Electronic Medical Records (EMRs) and process Explanation of Benefits (EOBs) through traditional automation formats. When a healthcare facility wants to input years of medical records into new integrated EMR systems, they often must manually go through documents, wasting substantial man hours and delaying use of newer, more efficient healthcare systems.

Cognitive automation can substantially improve these processes, enabling healthcare workers to focus on patient care instead of data collection. Records can be automatically parsed, allowing data to be transferred and organized in a fraction of the time. Improving how data is managed in healthcare can support a healthcare organizing in reaching goals to improve efficiency, deliver better care, , and lower costs for the patients they serve.

Cognitive Automation in Insurance

Companies in the insurance industry are some of the most obvious beneficiaries of cognitive automation technology. Because companies in this industry rely on a large number of forms and input data to make decisions about customer claims and many other core components of their business, they must deal with large amounts of data from a wide variety of non-standardized sources.

If a customer files an insurance claim, they would likely need to submit forms about the incident and work with a claims representative to validate it and process the claim. Without cognitive automation, automating review of this information would be extremely challenging due to the sheer amount of data entry need to convert unstructured data into usable structured data. Automated systems must be able to handle unexpected data input in this scenario, making human input necessary in traditional systems.

Cognitive automation greatly simplifies this process. New tools have the ability to dynamically extract unstructured input and work with existing data repositories to rapidly identify fraud. This can significantly streamline the claims process, allowing a greater portion of it to be processed without human intervention and allowing adjusters to focus on more complex or difficult claims. This increases the efficiency of claims processing while also improving fraud detection and delivering a better experience to customers.

4

Cognitive Automation in Sales Order Processing

Cognitive automation can provide a wide range of benefits to companies that process sales orders. Processing sales orders be a costly and time consuming task, necessitating a significant number of employees and paperwork. Dealing with suppliers, delivery providers and inventory can become the source of major overhead and room for error.

Traditional RPA solutions can only improve the efficiency of this process to a certain extent, as invoices may take many forms and usually need to be manually entered into an automated system.

Cognitive automation solutions can nearly fully automate the task of sales order processing, dynamically recognizing form structure and turning unstructured data into actionable information. Computer vision technology can read paper or digital sales orders while advanced AI can extract relevant information, identify errors or inconsistencies and automatically address orders as they come in. Cognitive automation solutions can dynamically respond to different layouts, identify labels and convert images into machine readable files. This substantially reduces the need for human intervention and improves the reliability of the system. It also allows human workers to spend their time focusing on more complicated problems.

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Cognitive Automation in Logistics

Major logistics companies process massive amounts of data in order to track shipments, invoice clients and ensure accountability across their fleet. In order to make effective decisions and deliver reliable service, shippers must keep track of freight invoice information, shipment information and tracking data. Each of these pieces can be kept in a wide range of formats. As logistics providers grow, expanding their reach to the global market, it can become challenging to manage all of this incoming data.

A large portion of this data will necessarily come in unstructured formats, necessitating human interaction. Cognitive solutions can parse data from disparate sources, allowing logistics providers to gain a more holistic understanding of their network. By automatically collecting information from warehouses, in-transit shipments and deliveries, companies can deliver a better customer experience and make proactive real time decisions that improve their efficiency.

Conclusion

Cognitive automation has the power to dramatically improve RPA implementations across the enterprise. Its human-like capabilities allow dynamic processing of novel unstructured data types such as text, natural language, images and paper documents. This allows companies in industries ranging from logistics to financial services to significantly reduce repetitive data entry tasks and multiply workplace productivity.

In the rapidly evolving world of automation, companies that are proactive will gain a significant competitive advantage over those that use last year's technology. In order to not be beat by a faster, more-nimble competitor, it is critical that companies utilize the most sophisticated automation technologies available. Cognitive automation that delivers an effective means to better integrate unstructured data into the RPA platform is key to reaching a higher level of automation maturity and driving business goals.

IQ Bot Delivers Streamlined Cognitive Automation to Your Business

IQ Bot from Automation Anywhere augments automation platforms using advanced cognitive technology, parsing unstructured data while constantly evolving to improve its performance. IQ Bot can be taught by business users without having to rely on data scientists or AI experts. This allows it to uncover and transform unstructured data to automate business processes faster and more efficiently while eliminating human error.





ABOUT AUTOMATION ANYWHERE

Automation Anywhere is the leader in Robotic Process Automation (RPA), the platform on which more organizations build world-class Intelligent Digital Workforces. Automation Anywhere's enterprise-grade platform uses software bots that work side by side with people to do much of the repetitive work in many industries. It combines sophisticated RPA, cognitive and embedded analytic technologies. Over 1,600 organizations use this AI-enabled solution to manage and scale business processes faster, with near-zero error rates, while dramatically reducing operational costs. Automation Anywhere provides automation technology to leading financial services, insurance, healthcare, technology, manufacturing, telecom and logistics companies globally.

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