Cognitive Automation:
6 STEPS TO SUCCESS

What cognitive automation is, why you need it, and how to do it right

Adding cognitive capabilities to robotic process automation (RPA) is the biggest trend in business process automation since, well, RPA. In this eBook, you’ll learn how to succeed with cognitive automation by following six basic steps.
RPA IS HOT BUT COGNITIVE AUTOMATION IS HOTTER

Everyone’s heard of RPA, and nearly everyone is doing it. Sales of RPA software between 2016 and 2022 is predicted to rise at an astounding 57% yearly rate at a time when enterprise software budgets are growing at just 4.1% annually.

But one aspect of RPA is raising corporate eyebrows even higher. **Cognitive automation.**

Almost half of enterprises implementing RPA in the next six months will be doing so with cognitive capabilities.

But what is cognitive automation? Confusion abounds, especially as it relates to artificial intelligence (AI)—another term that is bandied about fairly frequently these days.
DEFINING COGNITIVE AUTOMATION

Deloitte defines cognitive automation as a subset of artificial intelligence (AI) technologies that mimic human behavior:

IBM takes that definition and adds to it, defining cognitive automation as differing from AI in how it is used:

Combine these two definitions together, you see that cognitive automation is a subset of artificial intelligence—using specific AI techniques that mimic the way the human brain works—to assist humans in making decisions, completing tasks, or meeting goals.

All AI Techniques & Solutions Are Getting Evaluated

Which AI automation tools are you using or considering using?

<table>
<thead>
<tr>
<th>Technique</th>
<th>Piloted / Implemented</th>
<th>Evaluating</th>
<th>In next 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACHINE LEARNING (ML)</td>
<td>45%</td>
<td>21%</td>
<td>22%</td>
</tr>
<tr>
<td>VIRTUAL AGENTS</td>
<td>41%</td>
<td>23%</td>
<td>19%</td>
</tr>
<tr>
<td>COMPUTER VISION</td>
<td>37%</td>
<td>21%</td>
<td>24%</td>
</tr>
<tr>
<td>NATURAL LANGUAGE PROCESSING (NLP)</td>
<td>42%</td>
<td>18%</td>
<td>21%</td>
</tr>
<tr>
<td>NEURAL NETWORKS</td>
<td>37%</td>
<td>19%</td>
<td>23%</td>
</tr>
</tbody>
</table>

Source: Horses for Sources
WHAT RPA PLUS COGNITIVE CAPABILITIES CAN DO

Conventional RPA automates standard and easily repeatable tasks that involve processing highly structured data, such as that found in relational databases or spreadsheets. A good candidate for RPA would be processing payroll or sending invoices to customers based on standardized data input from applications or forms.

Cognitive automation, on the other hand, is capable of automating more complex tasks based on semi-structured or unstructured data. For example, a software robot (commonly called a bot) could use natural language processing to look at unstructured data in customer service emails—say, a customer asking for the status of an order—to send automated emails back. Since the amount of unstructured data in the world is much greater than structured (79.2% compared to 20.8%)—and growing much faster—cognitive automation is a welcome addition to traditional RPA.
WHAT’S INSIDE

SIX STEPS TO SUCCESS
Here are six steps you can take to boost your chances of deploying cognitive automation successfully.

1. Select the right process to automate first
2. Build a solid business case
3. Get buy-in from senior management and IT
4. Limit the initial scope of the deployment
5. Select a good set and variety of data for training
6. Scale and expand
STEP 1:
Select the right processes to automate first

Don’t be too ambitious when you start cognitive automation. Ernst & Young found that as many as 30% of initial cognitive RPA deployments fail—typically due to common mistakes that could be easily avoided. So pick a process that allows you to take a few baby steps and fall a few times without bringing down important enterprise operations.

First try a back-office task that uses semi-structured data—one that isn’t customer facing—such as invoice or purchase order (P.O.) processing, insurance claims processing, or a know-your-customer (KYC) task.
STEP 2: Build a solid business case

Automate a process that will give you a decent return on investment (ROI) within a reasonable timeframe.

*PwC found that although the payback period for a cognitive automation initiative in the financial services industry can be as fast as six months, on average it is approximately 14 months. Leading areas of high ROI were operations, finance, and IT.*

What’s the way to ensure ROI? Pick processes that involve sufficient number of people—at least 10 employees in developed countries where labor costs are high, or at least 50 employees from developing geographies. Also make sure that you’re processing sufficient number of documents—at least a few hundred a day—or are using the system for multiple processes to make it worthwhile.

Source: PwC 2017
STEP 3: Get buy-in from senior management and IT

Many cognitive automation projects start with business functions such as finance or HR, or within shared-services operations that provide businesses with a range of services ranging from legal to accounting to payroll. Leaders within these business units recognize the potential value of RPA, and eagerly jump in to reap the benefits they’ve been hearing about.

But before embarking on a cognitive automation initiative, make sure you have buy-in from both senior executives and IT. Businesses have found that winning a champion in senior management greatly increases the chances of getting the resources needed to make the project a success.

If your business already has an RPA center of excellence (CoE), that is the ideal place to start.
STEP 4: Limit initial scope

Use the Pareto principle to keep your initial cognitive automation projects manageable.

Also known as the 80/20 rule, the Pareto principle estimates that, for many objectives, roughly 80% of the success comes from just 20% of the effort. So if you’re trying to process invoices in a global enterprise, don’t attempt to automatically process invoices from every language. Stick to English and Spanish at first, and you’ll reach 80% of your processing goals.

Likewise, choose one department or division to start with, rather than implementing a cognitive automation scheme enterprise-wide. Start small with a pilot and fine-tune it before you attempt to scale.
STEP 5:
Select a representative set of documents to “train” the cognitive system

Cognitive computing is data hungry. The more data you give it, the more accurate the results will be. For example, if you want to automate invoice processing, provide a good representative sample of invoices from various vendors, as the layout and even the field labels can vary greatly from company to company.

Generally, several hundred if not thousands of documents should be provided to the system to ensure success.
STEP 5: Scale and expand

After you’ve succeeded with your initial implementation, gradually introduce even more complex processes—for example, moving from semi-structured to completely unstructured data.

So rather than simply responding automatically to customers’ email requests for payment status, you could program a cognitive bot to manage emails from a vendor support portal, where the queries are more varied, and the interactions thus more complex.
A large global food conglomerate was spending a lot of time and resources manually processing invoices in numerous separate “shared services” centers around the world. It selected Automation Anywhere’s global digital workforce platform—which includes RPA, cognitive capabilities, and analytics—because of the unique ability of Automation Anywhere’s IQ Bot product to automate processes without needing help from data scientists or AI experts.

For the pilot test of IQ Bot, the company selected one of its smaller shared services centers, which processed 200+ invoices daily. By selecting a reasonably—but not overly—complex business process in a small division, the company greatly increased its chances of success.

The company provided Automation Anywhere with a sample of 500 invoices covering most of the more common invoice formats encountered from its vendors.

Automation Anywhere’s services team worked closely with the multinational company to create, train, and set up an IQ Bot software robot (intelligent bot) that could recognize different invoice layouts, understand the labels (such as date and amount), and convert the invoice image into a structured machine-readable file. They also built traditional RPA bots that fed invoices into the IQ Bot, and which took the IQ Bot-generated machine-readable file and validated it against the company’s legacy ERP (enterprise resource planning) system.
Within a few weeks, IQ Bot was able to automate 75% of the invoices flowing through the company’s system. After this initial success, the company is now rapidly expanding the use of IQ Bot to automate five additional document-centric processes at the shared-services center, as well as deploy IQ Bot at two additional global locations.
COGNITIVE RPA IS ALREADY HERE

Leading companies around the world are already deploying it to automate much more complex—and business critical—processes than were previously possible. It’s the next logical step to take after deploying traditional RPA. ROI is also faster and higher than with traditional RPA. So what’s stopping you from implementing a cognitive automation pilot or proof of concept today?

Call 1-888-484-3535 or visit www.AutomationAnywhere.com to schedule a live demo.

Automation Anywhere www.automationanywhere.com

North America: 1-888-484-3535 x1 | International: 1-408-834-7676 x1

@AutomationAnywh www.linkedin.com/company/automation-anywhere sales@automationanywhere.com

Automation Anywhere ©2018
GO BE GREAT.

Automation Anywhere empowers people whose ideas, thoughts, and focus make the companies they work for great. We deliver the world’s most sophisticated digital workforce platform, making work more human by automating business processes and liberating people to do the things humans are most capable of.

To date, Automation Anywhere has helped more than 900 global enterprises build digital workforces – 500,000 automation full-time equivalents that have saved hundreds of millions of hours of manual tasks. Several dozen of our customers already have more than 1,000 bots deployed. And by all projections, the RPA-powered digital workforce is expected to continue to grow at a rapid pace.