Move aside RPA – Cognitive Automation has Arrived

Business automation needs a revamp.

Business automation needs a revamp. Is cognitive computing, the offshoot of AI concerned with emulating human thought process, the technology to provide it?

Just as industrial robots sparked a new era of high productivity in blue collar industries, Robotic Process Automation has, over the last twenty years, revolutionized those of the white collar. Now promises of RPA are plateauing, and enterprises are already looking beyond it.

The promise of Robotic Process Automation

[RPA gave business a new way to think about, well, pretty much everything](). Whether applied by workers to administer business processes, IT, workflow, remote infrastructure, or back-office work, the two core benefits are the same: First, improvements in accuracy, as human error is minimized. Second, reductions in the amount of time it takes to get work done.

RPA also elevates the nature of work by removing people from dull, repetitive tasks. But that is exactly its problem – the only things it is capable of automating are brainless. Data entry, information capture, button pushing. These tasks involve no intelligence and can be easily programmed. The stuff RPA does is, literally, robotic.

All these benefits aside, RPA's capabilities are limited to tasks that involve no intelligence and can be easily programmed. The question arises whether it's possible to achieve the same kind of productivity gains in intelligent tasks? The answer is a resounding yes. Cognitive Automation brings in a whole new level of sophistication.

While most workers now are are freed from the most mind-numbing of tasks, they are still chained to workflows far below their intelligence. A procurement manager no longer has to transfer service provider pitches into a central document, but she still must waste an entire day looking through the list an RPA tool has given her in order to narrow it down to a shortlist of best options.

There are an abundance of value-added tasks she could be doing – meeting providers in person, building industry know-how in her internal team, aligning services to long-term strategy – which would give her employer higher ROI. But she can't. She is still in a situation where precious time and resources are consumed doing things manually, choosing from limited options and making sub-optimal decisions.

Enter Cognitive Automation

To enable humans to engage only in work that corresponds to their full intelligence, we need to be able to call on machines much smarter than those that fall under the RPA umbrella. Machines that emulate more closely and enhance human thought process. This is why

companies like Coseer and [IBM think Cognitive Automation is the next logical step for businesses to take](#).

Enabled by advances in the technology of cognitive computing, Cognitive Automation is driven by artificial intelligence that can build knowledge, understand natural language, interact naturally with human beings, and overcome ambiguity and adapt to new types of problems. It's configurable AI for human language.

Check out Cognitive Automation in action for [Finance](#), [Healthcare](#), [Law](#) and [Retail](#). More use cases on our website.

Cognitive Automation excels in tasks involving masses of unstructured data sets. These tasks typically require decision-making that can be self-taught and a human-like understanding of context. Our procurement manager for example would not only be given a shortlist of best options based on pitch data – she would also get, thanks to Cognitive Automation, an intelligent feed of external data like social media feedback from existing clients or analytical coverage in trade magazines that give a more rounded view of the quality of a provider's service.

In the financial sector, we can imagine Cognitive Automation as a team of interns, 1,000s-strong, crunching through a million documents each day, finding the five-to-ten bullet points that will be relevant to each of a stock market investor's decisions. In retail, as an intelligent assistant intuitively stepping-in to influence consumer buying decisions. In healthcare, as the most well-read doctor in the world, annotating pathways at life-saving speed. Cognitive computing is the key to unlocking the automation of complex workflow.

RPA, Cognitive Automation, and Real World Workflows

To explore a use case that can be applied to almost every enterprise, especially those in the finance, tax, legal and government sectors, let's look at document redaction.

Being equal parts important and laborious, redacting sensitive information is a universal pain-in-the-ass. Not only is it expensive and a major bottleneck for knowledge-sharing within and outside of organizations, it's dangerous – human lapses in redaction [account for 25% of all data breaches](#) (40% in the case of governments). As the recent WannaCry attack underlined, global cybersecurity risks are growing increasingly severe – yet, in the case of redaction, most of these breaches are inadvertent or easily avoidable.

RPA can already:

- Redact anything that follows a certain pattern, like a social security or credit card number.
- Redact anything with a repeating pattern, like a name.
- Redact all names given in a list; clients, potential vendors, mergers and acquisition

targets, and so on.

Such software improves security and saves a lot of time. A business can be 100% sure a document it shares with a marketing affiliate contains no social security number, while the finding and redacting of that number is completed in a flash.

However, redaction is not always that straightforward. Decisions need to be made based on the context. For example, in a sentence like "President lives in the White House", there is hardly anything that needs redaction. However, "The president met with Mr.Comey at the White House." may call for redaction of "President", "Mr. Comey" and "White House".

Consider the token "39%" in the following sentences - "IRS's maximum tax slab is north of 39%", and "Apple's offshore cash reserves are 39% of total assets."
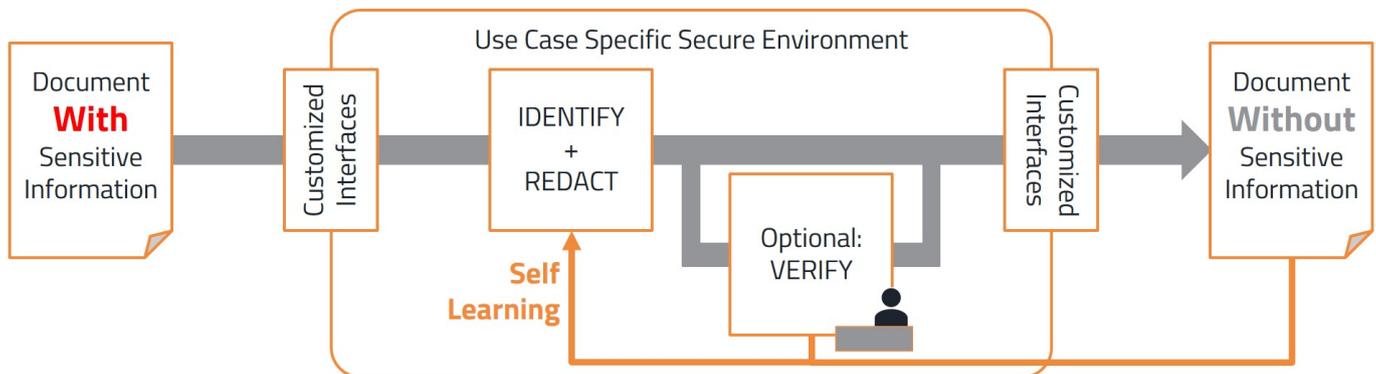
Cognitive Automation builds on RPA's qualities and introduces an extra level of sophistication; contextual adaptation. Like a business adapting its strategy to dynamic market conditions, Cognitive Automation can adapt the rules it uses to redact information depending on the evolution in the context of the data and workflow it processes.

When combined with other cognitive capabilities, this creates a much more intuitive form of enterprise and an information architecture humans can easily and naturally interact with. For example, a chatbot could sit between the worker and the information they need: The worker requests the information using natural language search and the chatbot, recognizing the worker's relevant position and role within the organization, retrieves the documents which contain that information, automatically redacting any other confidential information that happens to be included alongside. If someone more senior looks at the same document, they will be able to see more of the information.

Cognitive Automation is not without its downsides. However, it promises disruptive transformation in business models, because things that used to take days, even weeks, are now

done in milliseconds using Cognitive Automation.

Cognitive Automation is not without its downsides. It is a nascent industry, and programs can take anywhere from four weeks to two years to configure and train.

But, if business is willing to look beyond the hyperbole and think about how this technology can be applied tactically within the organization, it will reap the rewards successful application brings; the enabling of workflows that were once prohibitively expensive, took too much time, or were overly-dependent on the people completing them; and the freeing of human capital to focus on more complex and value-added work.

Further Reading: [Three Laws Driving ROI for an AI Project](#)

In short, cognitive automation is here to complete the revolution robotic process automation started.

Curious to learn what Cognitive Automation can do for you? [Setup a call with our team.](#)

What is Next-Generation Enterprise Search?

Coseer's search solutions are transforming industries from healthcare to finance. Our point-and-shoot AI trains finds answers and insights with 95%+ accuracy within 4-12 weeks - all of this in 100% security. The reason? We founded Coseer on the principle that computers should take care of the boring stuff so that humans can focus on creativity and judgment. To that end, we've built enterprise search solutions to complete complex workflows just as humans would in a fraction of the time. Fortune 500 leaders are using Coseer to speed up and automate their most complex work.

We follow a tactical approach to enterprise search:

- We deliver 95-98% accurate solutions within 4-12 weeks.
- Our solutions deploy entirely behind your own firewall for 100% security, and every decision point is logged for full transparency.
- You add the finishing touches, but our point-and-shoot AI practically trains itself. No more huge training data sets or time wasted annotating and tagging.

Visit our [website](#) for in-depth case studies, ROI breakdowns per industry, and other insight.