



# Automation in procurement: Your new workforce is here

Five steps procurement organisations  
can take to create a partnership  
between bots and employees to  
achieve optimal efficiency and  
quantifiable benefits

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# The evolution of the procurement organisation

**Your new procurement employee will work 24/7, never call in sick, rarely make mistakes, won't complain, and never ask for a raise. Of course, this is not your typical worker, but a procurement software robot – or “bot.”**

When it comes to procurement, the automation of processes and the adoption of digital procurement technologies have been advancing for a number of years. Source-to-Pay technology solutions have streamlined and automated many of the tactical activities involved in procurement. However, many activities that can best be described as “transactional” or even “swivel chair” remain, and jobs involving advanced analytics suffer from data gaps, system gaps, and resource gaps.

Leveraging procurement bots is the next logical step as organisations look to benefit from advancements in digital capabilities.

Like every transformative technology, the implementation of procurement bots, while exciting, is not without challenges.

Since these bots will likely directly affect the procurement workforce, the chief fear among workers is that their jobs will be eliminated. Businesses have been through many cycles where such concerns were raised: reengineering, ERP implementation, and outsourcing, among others. However, because the implementation of bots is new to the procurement organisation—and is futuristic-sounding—many employees do not know quite what to make of it, only intensifying their apprehension.

Given these concerns around bots, it is essential that companies pursue a comprehensive change management programme to develop the best strategy for both the larger business picture and the welfare of their workforce. This change management programme must begin with leadership and include all stakeholders throughout the organisation.

Transparency is also crucial, so employees can understand the extent of the changes bots will bring and how their day-to-day activities will be different in the future. Employees must be shown the benefits bots can bring to their jobs. For example, one of the main selling points of procurement bots is that they will free workers from repetitive, manual tasks. Moreover, the automation of myriad existing procurement processes will provide the opportunity for companies to invest in the development of their personnel outside of their current responsibilities. These new capabilities may include the management of the new automated processes that have replaced manual processes or a move into a more creative position, one with fewer tedious or mundane tasks.

While the displacement of workers will not necessarily be a part of every implementation of bots, it is inevitable that the transition to a highly automated procurement organisation will likely result in the elimination of several classes of jobs. In these instances, companies must demonstrate that affected employees are supported and treated fairly.

The impact of procurement bots on business stakeholders should be considered as well. Will those stakeholders fear that procurement professionals they regularly work with will no longer be there? Will working with a bot require them to learn how to use new software?

To gain a better understanding of these issues, we will look at the growing use of software bots by today's forward-thinking companies and outline how bots can work within the procurement organisation. We will also offer five steps that procurement officers should take to facilitate the success of a bot implementation.

In many ways, bots are part of a natural development of the workforce, just as assembly lines and mechanical automation improved the efficiency and effectiveness of manufacturing. But success will only come if humans can see bots as their partners, not as competitors.

## Companies are adopting RPA

RPA is being used across all industries and in a variety of areas. Here are just three examples of companies that have already adopted RPA to processes within their organisations.

- A leading global energy provider automated its upstream goods receipt and issue process using procurement bots. The bot helped the company maintain an accurate accounting and inventory of goods flowing in and out of its warehouses and save thousands of work-hours spent on manual goods receipt and issue process.
- An Australian bank is using RPA for invoice processing, payroll administration, complaint management, and other areas that have monotonous, time-consuming activities. In one area of payments, the bank said it used RPA to reduce the number of human staff from 40 to 2.
- An American multinational telecommunications corporation is using process automation to help finance employees evaluate the business case for technology projects. Instead of manually pulling information from different systems, the company is using bots to perform time-consuming tasks on analysis—and do so much faster than usual.
- An American provider of health insurance is using automated technology and its language processing, hypothesis generation and machine learning components to make the insurer's health care utilisation management functions more efficient, effective, and consistent.

### Sources:

<http://www.afr.com/technology/rise-of-the-machines-as-brings-in-robot-workers-to-do-the-boring-jobs-20150820-gj3fp6>

<https://blogs.wsj.com/cio/2016/05/15/employees-automate-repetitive-tasks-with-software-bots/>

<https://www.forbes.com/sites/bruceupbin/2013/02/08/ibms-watson-gets-its-first-piece-of-business-in-healthcare/#5c192f345402>

# Growing popularity

**Despite the challenges of integrating bots into the existing workforce, organisations are finding that the benefits of bots are increasingly harder to ignore. Robotic Process Automation (RPA) has quickly become one of the new buzzwords, and its rapidly growing popularity should not be surprising.**

In today's increasingly competitive environment, RPA can offer savings on labour costs and offer increased efficiency and accuracy. Cost takeout through automation is much higher (40–75 percent) compared to labour arbitrage (15–30 percent).<sup>1</sup> It can help bridge skills gaps as well as improve quality and reduce errors. At its more sophisticated levels, it can enable faster decision making. For these and other reasons, RPA is experiencing a rapid adoption in many organisations and fundamentally changing the way business is done. Today, the new normal is fewer less-experienced workers to deliver the same amount of work. Consider these statistics:

- The global market for robots and artificial intelligence is expected to reach \$152.7 billion by 2020.<sup>2</sup>
- According to Quid, from 2010 to 2014, private investment in artificial intelligence grew from \$1.7 billion to \$14.9 billion.
- Research from The London School of Economics suggests a return on investment in robotic technologies of between 600 percent and 800 percent for specific tasks.<sup>3</sup>
- McKinsey research suggests that smart robots will replace more than 120 million knowledge workers by 2025.
- Gartner predicts that by 2020, smart machines will be a top-five investment priority for more than 30 percent of chief information officers.
- 55 percent of North American enterprises are looking at new opportunities available with RPA systems, according to a study by HfS Research and KPMG.<sup>4</sup>

As CPOs come under increasing pressure to seek ways to foster meaningful improvements to their company's procurement processes, RPA will be seen as an increasingly attractive means to gain efficiencies and reduce costs.

- 1 The Outsourcing Institute, "Three Secrets Your Traditional Service Providers Are Not Telling You," June 2014 KPMG analysis.
- 2 "Robot Revolution—Global Robots & AI Primer"—Bank of American Merrill Lynch 2015
- 3 "LSE — The IT Function and Robotic Process Automation"—The London School of Economics and Political Science 2015
- 4 "Achieving Value Beyond Cost"—HfS Research and KPMG LLP 2015

# The robotic workforce

The use of bots to automate procurement processes can be hard to visualise, especially since much of the activity typically takes place “behind the scenes.” So, before discussing the details of a change management effort, it may be useful to first take a look at how bots can be deployed within an organisation.

Every company has any number of back-office systems that require workers to perform manual, repetitive tasks. These include reviewing and verifying information that has been entered into a system (such as requisitions), copying information from one system to another, rekeying information, contacting other employees or suppliers to request additional information, or filling out spreadsheets drawing from multiple inputs. These activities can take a large percentage of a worker’s day and, as such, are a costly expense.

Basic bots are designed to take on these lower-level, rules-based, and repetitive tasks common within procurement organisations. Essentially, the bots lie on top of the organisation’s legacy systems, typically working in the background; although, some will have an interface so

people can interact with them. As for the workers whose activities these “bots” automate, they will now be free to focus on more strategic initiatives.

More advanced bots can execute complex cognitive tasks that mimic human behaviour. In its most advanced form, bots can interpret vast amounts of data from multiple structured and unstructured sources, including text, voice, images, and video. These bots can evaluate information and use specific algorithms and ontologies to simulate reasoning—make decisions based on a mix of evidence and probability—in a way that would mimic human actions. These bots can work alongside procurement professionals to streamline and improve some of the organisation’s most strategic activities, such as category management and supplier management. They can spot patterns in spend and operations, proactively seek market intelligence on suppliers and categories, and even provide coaching to both procurement and business users on the ins and outs of process and policies. While it is unlikely such bots will completely replace “strategic” procurement personnel, they will likely improve the efficiency and quality of the processes those personnel support.

# Applying change management to the implementation of bots

Once the decision has been made to implement bots within procurement, organisations must turn their attention to creating an effective change management programme to ease the transition into the workforce. To successfully incorporate bots within processes and teams, organisations must proactively address the impacts to their people and the overall organisation in order to minimize business disruption and expedite the realisation of business benefits.

**Here are five steps procurement professionals should consider when contemplating deploying bots within their organization:**

## 1. Agree on the future vision for the organisation

Even if bots are implemented initially only in procurement, there will be repercussions throughout the organisation as certain human exchanges between departments are transitioned to a human-to-bot interaction. therefore, it is vital that leadership is onboard with the implementation. Leaders often need assistance to envision the future digital workforce.

Therefore, procurement professionals need to be able to argue a convincing business case for their bot strategy and outline their vision for the future.

Leadership, in turn, should be able to articulate its robotics vision and how bots will influence the company overall, including changes in workforce, operating models, infrastructure, and management. This will also necessitate leadership alignment around the timing, readiness, and scope of the robotics initiative.

**2. Actively manage the change of digital procurement** To improve the chances of a successful implementation, several change management activities are required to be executed. **Here are five steps change management professionals should consider when contemplating deploying bots within their organisation:**

**Our proactive and phased methodology is about getting stakeholders ready, willing, and able to change:**



### **3. Implement an adaptive workforce alignment for evolving digital needs**

While worker displacement will not necessarily be a part of every bot implementation, clearly, in some cases, bots will replace human employees. These cases will likely increase as the role of bots is expanded and as processes are redesigned to take advantage of the automation.

To reap the full benefits of these changes and ensure they are implemented successfully, procurement leaders should engage HR early on to discuss their evolving workforce. To aid in this process, procurement officials should advocate that HR deploy strong organisational design tools to help reshape their new workforce and confirm the benefits realised from digital labour.

### **4. Plan for talent hiring, reskilling, and exiting talent**

Plans for an initial implementation of software bots is only the beginning. Robotic process automation is a constantly evolving area, with each generation of bots being able to take on an increasing variety of ever more sophisticated human tasks. Given that evolution, deploying bots is a good opportunity to evaluate the company's long-term talent management programme.

As part of the change management plan, procurement officials should include proactive talent management strategies that address not only short-term workforce implications but also future talent needs. Organisations must proactively analyse their workforce and forecast for the type and number of workers needed in the future, as well as the skills they will require, and develop workforce plans to bridge critical talent gaps for both existing and new employees.

### **3. Adopting and adapting to the new ways of working**

Given the new relationship between humans and bots, changing behaviours among employees will inevitably present challenges. A successful bot implementation is the start of a long journey of changing perceptions. Procurement professionals will want to ensure there are capabilities within the organisation to sustain the change and ongoing improvement efforts.

# The KPMG experience with bots in procurement

**KPMG is an industry leader in automation.**

## KPMG is using digital labour to transform how our clients operate.

### Enable efficiency through full robotisation life cycle



We have assisted multiple clients to create, implement, and execute a well-developed RPA road map for value realisation.

We have supported clients through the building of RPAs, understanding the impact to affected stakeholders, and rolling out solutions on a global scale.

### Solve business issues through digital labor



KPMG has applied digital labour technologies to pervasive finance Organization issues, forever changing how our clients conduct these activities and continue to evolve.

KPMG's People and Change practice has significant experience helping clients across most industries and of various sizes address their most pressing people issues.

### Define new ways of working through cognitive automation



Working in an exclusive arrangement with IBM Watson, KPMG is working to solve industry problems and reinvent how we serve our clients.

## KPMG's digital labour thought leadership



The creative CIOs agenda: Getting started with digital labour



Digital labour and the future of finance



RPA & cognitive automation in healthcare



Transforming business models with RPA



Bots in the back office: The coming sprint of digital labour

**KPMG’s digital labour credentials cover multiple industries.**

More than 600 bots have been successfully deployed

Client	Industry	Scope	Maturity
Multinational motion picture studio	Media/entertainment	<ul style="list-style-type: none"> <li>— Automation assessment of 98 finance processes</li> <li>— Proof of concept on the intercompany process</li> <li>— Technology vendor assessment</li> </ul>	Assessment, proof of concept
Multinational telecom companies	Tele-communications	<ul style="list-style-type: none"> <li>— COE design</li> <li>— Change management</li> <li>— Bot design and build</li> <li>— Bot QA</li> <li>— Infrastructure and architecture support</li> <li>— Training</li> </ul>	Mature
Multinational beverage manufacturer	Food and beverage	<ul style="list-style-type: none"> <li>— COE design</li> <li>— Change management and comms</li> <li>— Bot design, build, and test</li> <li>— Functional and technical design</li> </ul>	Mature
Multinational life sciences companies	Life sciences and healthcare	<ul style="list-style-type: none"> <li>— Functional and technical design specification</li> <li>— Proof of concept</li> <li>— Pilot deployments</li> <li>— Chat bots proof of concept</li> </ul>	Proof of concept, pilot
Large commercial banks	Banking	<ul style="list-style-type: none"> <li>— Automation of customer onboarding compliance</li> <li>— Extraction of unstructured data and NLP</li> <li>— Risk assessment prioritisation</li> <li>— Proof of concept</li> </ul>	Pilot
U.S. utility companies	Energy and utilities	<ul style="list-style-type: none"> <li>— Process decomposition mapping</li> <li>— Automation opportunity analysis</li> <li>— Automation strategy development</li> <li>— Chat bots proof of concept</li> </ul>	Proof of concept, pilot, and beyond
World’s largest retailer	Consumer retail	<ul style="list-style-type: none"> <li>— Digital labour blueprint and road map</li> <li>— DL governance model for global shared services</li> <li>— Evaluation of technology platforms</li> <li>— Bot build for finance and HR processes</li> </ul>	Mature

# Final thoughts

**The implementation of bots in the procurement organisation is an increasingly attractive option for CPOs to gain efficiencies and reduce costs within their procurement organisation. However, bots will also fundamentally transform the way organisations work now and in the future.**

**Past major initiatives such as EDI, e-procurement, and procurement outsourcing dramatically reduced the transactional workload, freeing up labour to focus on other higher-value activities. In many cases, procurement staffing remained flat or decreased even while procurement expanded its scope of influence and services to the organisation. The adoption of bots in procurement may follow a similar course, enabling valuable new procurement services and capabilities, expanding influence and value, all while keeping headcount flat or even reducing headcount.**

**In anticipation of these changes, employees are likely to fear this innovative technology and the effect it will have on their jobs.**

**But bots do not necessarily have to cause this anxiety among a company's workforce. An effective change management programme around bots can go a long way to allaying these fears. This includes the clear articulation of leadership's vision around bots and their benefits, transparency and support around workforce displacement, and the careful management of a cultural shift so workers can see bots as an opportunity and not a threat.**



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