

Automation and Professional Services:

Robotic Process Automation and its Impact on Business Processes

By Kelvin Jones, Senior Partner

The global market for RPA software and services reached \$271 million in 2016, will top \$440 million this year, and is expected to grow to \$1.2 billion by 2021 at a compound annual growth rate of 36%.

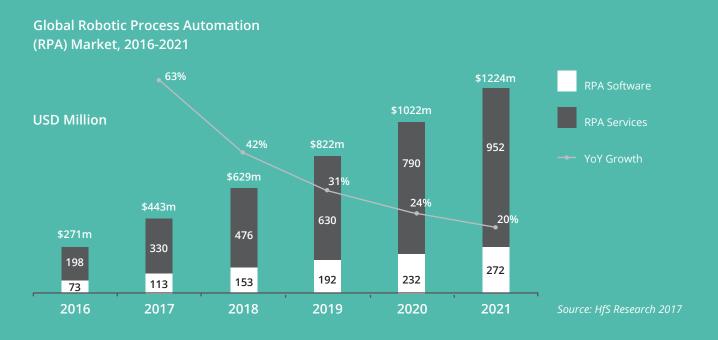
Robotic Process Automation (RPA) is fundamentally transforming the finance, accounting, and customer contact departments of major businesses. These are the most mature business areas for RPA, representing over 40% of deployments, but it is now starting to spread out from these into other corporate areas. This trend will continue and accelerate into 2018. In HR departments, RPA is now growing from a relatively slow start (due mainly to a historical lack of investment) with vendors like UiPath now undertaking numerous projects, particularly in mainland Europe.

Nevertheless, any high volume and transactional processes, especially in highly regulated industries, are ideal candidates for RPA. This is not only confined to specific industries as the robotic revolution of the late 20th centutury was. Major RPA deployments are genuinely happening cross-industry including oil and gas, banking and insurance, retail, life sciences, and manufacturing; with many industry specific deployments such as claims processing, card activation, and fraud claims discovery in financial services.

This is also truly global in nature. The US and the UK are currently the biggest markets for RPA, accounting for 52% and 21% of software license sales, respectively. Other areas of explosive growth are the Nordics, Japan, and Australia, mainly because these areas did not tend to outsource or offshore and now see RPA as an opportunity to leapfrog over those economies that went through labour arbitrage.

Looking Back

Automation is not a new phenomenon and its impact on the manufacturing space over many decades has been easy to see. These days, the label of 'handmade' fills many consumers with a sense of nostalgic quality. The thought being that a product produced with human eye and hand and its inherent flaws is somehow superior to the digital accuracy of one produced by a machine. Particularly in the automotive industry, we experienced a dramatic transformation towards the end of the last century, leaving swathes of manufacturing workers jobless to make way for cheaper, more efficient, and faster robots.





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The Nissan car plant in Sunderland is a classic example: it produces over 500,000 vehicles each year - more than any other factory in Europe - and yet it employs just 6,000 people; a fraction of the number of human workers that would have been needed before advanced robotics transformed the manufacturing process. As the old joke goes, the factory of the future might only need a human and a dog to keep it running: a dog to make sure that no-one tampers with the machines, and a human to feed the dog.

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Rohan Silva, Former Senior Policy Adviser to David Cameron

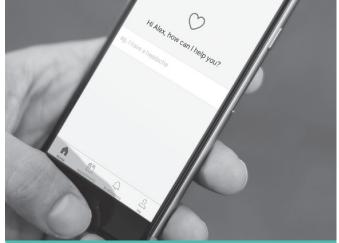
Today's RPA

That emphasis is changing. If the most precarious job in Britain in the 1970s and 1980s was as a worker in a factory, today it's the middle class' white-collar jobs. We are seeing in-roads made by machines into areas, that up until very recently, were considered unassailable bastions of human activity. In retail, robots are patrolling the aisles of supermarkets and

department stores checking and replenishing shelf stock whilst monitoring and analysing shopper's behaviour. In healthcare, patient monitoring and medicine dispensing is being delivered by automated systems, and in teaching hospitals in Boston USA and elsewhere, software is being used to diagnose medical conditions.



Bossa Nova has been developing its robot technology over the past few years, setting out to serve retailers through automation and analytics. **Read more**



Babylon Health: the London-based company's team of 170 AI researchers is not merely building a lexicon of diseases — it is trying to create a robot doctor that can triage, diagnose and even treat individuals over their phones. **Read more**

However, it is in the office and administrative spaces where the biggest impact is being felt with the advent of RPA (see <u>Automation Anywhere</u>, <u>Blue Prism</u>, & <u>UiPath</u>). A digital office workforce without salaries, holidays, or sick pay, working 24/7/365 is now being deployed.



The World Economic Forum expects 5.1 million jobs will be lost to automation by 2020 in 15 major countries, two-thirds of which will be in the office and administrative sectors. It is here we will see the robots biggest impact. Jobs in Finance, Accounting, HR, and industry specific functions within Banking, Financial Services, Insurance (computing algorithms carry out practically all stock market trading), Telecommunications, Pharmaceuticals and Manufacturing are all being automated using robotic technology. In a recent Capgemini survey, 25% of respondents that had deployed RPA said they had done so in the Finance and Accounting Department. These are job roles traditionally occupied by young graduates seeking a secure and upwardly mobile career.



My general prediction is that RPA will become the standard way that organizations run their operations (for both unattended back office activities and attended customer centric processes). Some of the predictions as to scale are wildly optimistic but the RPA and broader intelligent automation market will be worth multibillions per year within the next three to five years.



Guy Kirkwood, Chief Evangelist, UiPath



UiPath is the leading Robotic Process Automation vendor providing a complete software platform to help organizations like yours to efficiently automate business processes. A software robot aims to manipulate the presentation layer of application software in the same manner a human does.



Professional Services, IT Services, and Outsourcing

Oxford University academics, Carl Frey and Michael Osborne, firmly believe millions of jobs in sectors such as accounting and auditing will be replaced with machines that can do the same tasks much more cheaply and effectively than human workers. True or not, the impact on Professional Services firms - who will be pressurised into replacing expensive graduate recruits with increasingly intelligent robots - will be significant. Not only is there a very compelling cost imperative, but with regulators across many industries welcoming the introduction of robots because of their unerring accuracy and consistency, accountants and auditors will find increasing demand for automation for compliance reasons.

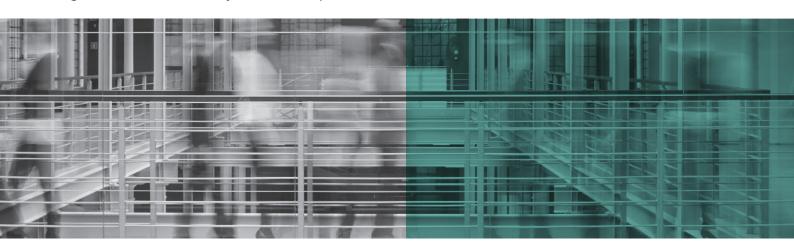
The immediate effect of all this, particularly in finance and accounting, contact centres, and HR has already been felt in the global business process outsourcing (BPO) market. The BPO sector is currently worth over \$300bn worldwide. In India alone, more than 3 million people are employed doing BPO and shared services work; the Philippines has another million; and across Europe and the US, many, many more workers earn their living through BPO. It is very easy to see that RPA is a real threat to any outsourcing deal that involves business processes. Especially when one considers that a software robot costs around one ninth of a full-time Equivalent (FTE) person working in the UK or the US, or a third of the cost of an FTE working in India. Many of these jobs are now in jeopardy.

Miriam Deasy, a senior analyst with Ovum recently confirmed that 2017 outsourcing deals in the US have "fallen off a cliff." This means that large, global organisations such as Infosys, TCS, and Wipro, who

have built their business model around an offshore labour arbitrage model, will have to completely change their mindset and business models in order to maintain their global positions.

It is not just in offshore outsourcing where the effect is being felt. In audit and accountancy firms, first and second-year auditors will no longer be 'spreadsheet jockeys' as these tasks get allocated to robots. This potentially will allow them to be billed out at higher day rates, if not in the kinds of volumes we've experienced before. The longer-term picture is less positive as many expect rates are generally likely to drop across the board. KPMG have already started this process but Deloitte and PwC are quickly following.

As RPA completely transforms business processes across the board, management consulting firms will see a bounce in revenue associated with the design of new digital processes, and the resultant business transformation and integration of the new robotic automation. Once this is achieved however, they could potentially be facing a revenue cliff as their own existing business model is no longer relevant to their clients because increasing cognitive robots will update and improve their own process performance. Professional Services firms will need to adapt new engagement models, new tools, and skill-sets and to hire different talents to remain relevant in the new world order. One potential scenario is that the traditional management consulting firms could challenge the incumbent BPO providers by backing up their business process consulting services to their clients with Business Process-as-a-Service offerings utilising their own robots.



What does the future hold?

This is the major question facing young graduates thinking of joining the management consulting and accountancy firms. Traditionally, these professionals have cut their teeth by gaining valuable experience body-shopping into their master's corporate clients. With these jobs delivered by their client's own robots or on a 'as-a-service' basis by their employers' robots, where will boardroom's trusted advisors of the future learn their trade? What is very apparent is that the professional services executives of tomorrow will look very different from that of today. They will possess a completely different skills, experiences, and education mix.

The historic lessons of the first, second, and third industrial revolutions are that new technology creates more jobs than it replaces in the long run, accelerating and improving industrial and cultural development. RPA and intelligent automation (potentially part of the fourth industrial revolution) delivers the mundane, repetitive rules-based tasks that human employees really do not want to do. Even with the advent of more intelligent and cognitive machines, we will see the increasing release of humans to concentrate on more creative work. RPA will inevitably boost company's efficiency and output, creating a stronger economy and greater opportunity. This all requires careful consideration and will fall, in large part, to the professional services firms to define how corporates engage and integrate their digital and human workforces.

We must be optimistic about the future because it's a self-fulfilling prophecy. If we are creative and ambitious, intelligent machines will liberate us and be as profound a boon to our prosperity as electricity. If we are fearful, and fail to press ahead, we could be overwhelmed by automation and inequality.

Garry Kasparov, Chess Grand Master



About the author

Kelvin is a Senior Partner at Erevena and has over 20 years of executive search experience. He joined Erevena in August 2010 with a focus on enterprise technology and IT services and outsourcing, predominantly in relation to business process services and digital transformation. More recently, Kelvin has led Erevena's engagement with the emerging robotic and intelligent process automation sector.

Located in our London office, Kelvin works on leadership appointments across the EMEA region and the USA. He has helped organisations hire outstanding talent in a broad range of executive positions, but is particularly experienced in building the senior elements of his client's go-to-market teams.

Prior to joining Erevena, Kelvin was a managing consultant at Korn/Ferry Futurestep, before which he had been integral part of two boutique technology search firms.

Kelvin was educated at RMA Sandhurst and spent his early career in the Army.







About Erevena

At Erevena, we help to hire senior people into companies that are trying to do things differently.

We work with CXOs and shareholders to solve complex senior hiring challenges. We focus on your future.

We think that Search should be an advisory process. In solid-state organisations where it's 'business as usual,' companies understand their own needs and

In venture-backed companies, entrepreneurs are doing things that have never been done before. We have a long track record of working with founders

to shape strategies for how they hire the most situationally relevant executives to make their plans

The majority of industries are in a state of violent transition and many face threats that they don't understand and are not structured to withstand. Our work in venture has given us a lens into the future of many industries. We use this to work with executive teams to help them understand how best to adapt





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