As we say robot, will our children say colleague?

ey.com/betterworkingworld
#BetterQuestions

The better the question. The better the answer. The better the world works.
Contents

A new world of robotic process automation 2
Embracing robotics in the work place 3
Which tasks could RPA perform? 4
Embracing RPA: The benefits 6
Robotics and artificial intelligence: a collaboration 8
Where do we go from here? 12
Key Contacts 14
So will embracing robots mean replacing humans?

Automating routine tasks can allow humans to focus on ideas, innovation and higher-value work.
A new world of robotic process automation

In our changing world, robotic process automation (RPA) is becoming increasingly utilised in the workplace. The creation of robots to undertake jobs previously carried out by humans is fast being realised and all the indications are that as many as a third of jobs will be taken over by technology in the next twenty years.

Does this mean that robots be our colleagues in the future?

RPA is far removed from the idea of a physical ‘robot’ manually carrying out work - this is not a metallic humanoid with a digitised voice. Instead, a robot in this sense is the technology allowing organisations to configure computer software in order to complete various tasks.

RPA uses software ‘bots’ to:

- Capture and interpret existing applications to process a transaction
- Manipulate data
- Communicate with other systems
- Complete a process
- Trigger responses

RPA incorporates, rather than replaces, existing technology to enhance the productivity of the workforce.
Embracing robotics in the workplace

The growth of RPA is naturally accompanied by a fear that soon all of our jobs will be taken over by robots: this, however, is not the case. The occupations likely to be replaced by software bots are those which are repetitive in nature, which will be made more time and cost efficient by the use of RPA.

Nonetheless, humans are still expected to make up a significant part of the workforce, as RPA is effective for only a limited set of tasks. In fact, the virtual workforce will still be controlled by business operations teams, and business users will be able to train the bots. All of this means that our future is likely to be a coordination and collaboration between people and software.
Which tasks could RPA perform?

RPA is a rules-based automation, which is why it lends itself to performing methodical and systematic processes. With robotic automation, the virtual bot performs the activities its human predecessor used to, by moving through and across the relevant applications with its own user name and passwords.

Essentially, any processes which are structured, data intensive and rule-driven have the potential to be completed by these software bots. Repetitive administrative tasks such as data input and other non-face to face activities will be improved greatly through RPA. Primarily, software will be used for:

- **Data movement**: Sourcing, lightly transforming and loading data in/out of systems and tools e.g. spreadsheets or documents
- **Digital enablement**: Adding a digital/mobile front-end to application(s), particularly to legacy systems that are challenging to interface with
- **Data processing**: Rapidly performing repetitive tasks otherwise done by staff to reduce cost, accelerate timing, improve reliability and reduce risk
As we say robot, will our children say colleague?
Embracing RPA: The benefits

The benefits of utilising robotics for tasks and processes in the workplace are numerous. RPA allows employees to hand over mundane tasks to a robotic workforce, allowing them to apply themselves to core business objectives.
Cost

According to the Institute of Robotic Process Automation, RPA can create a financial saving of 25-50%. The creation and maintenance of the robots on average totals a third of an off-shore full time employee carrying out the same job.

Efficiency

The speed at which RPA completes processes is significantly less than their human predecessors. Robots are able to work around the clock and can typically cover the workload of two to five employees.

Quality

Despite the huge capability and skill of humans, errors within processes are inevitable. However, RPA is consistent and accurate, helping to ensuring that data is reliable, leading to optimised results.

1 http://www.irpanetwork.com/benefits-of-rpa
How Robots can be used in Human Resources

Although the ‘human’ in its title may indicate otherwise, Human Resources (HR) could be improved immeasurably with the implementation of RPA. Within HR, there are countless processes that are repetitive and systematic, and could be done faster, and to a better standard, through the use of software bots. For example, the significant amount of data entry and other repeated processes within on-boarding could be efficiently carried out by RPA.

Freed from routine and mundane tasks, HR employees can focus on skills that a computer cannot replicate, but that are vital to good business. Jobs such as leadership, and tasks that are more creative and interpersonal in nature can be built on and bettered. In this way, technology and RPA can be used to improve employees’ skills rather than getting in the way of them. Automation is not merely about cutting costs, but rather enhancing business and this is particularly the case in the field of HR.
Where could RPA help?

- On/off boarding
- Applicant sourcing
- Supporting recruitment
- Payroll
- Data entry, maintenance and cleansing
- Time and attendance
- Analytics
Robotics and Artificial Intelligence: a collaboration

With RPA, software bots can quickly and efficiently complete tasks, but these must be of a certain nature. If processes are not systematic and repeatable, they cannot be undertaken by RPA. However, with artificial intelligence (AI), robots are able to perform duties considered to be much more ‘human’.

For example, large elements of the recruitment process require judgement, knowledge and soft skills, which RPA is not able to provide. This is where AI comes in. Recruitment and candidate selection is now moving towards completion via AI, yet again providing greater efficiency, faster results and cost savings.
Using AI, this is how the recruitment process would work:

1. An automated skillset recommendation is be created, based on the job profile. A hiring manager can prioritise skills, and the system would learn this, predicting skillsets for later job postings.

2. The system would post the optimised job description to multiple job sites and portals, and aggregate and unify the responses.

3. First level CV screening is carried out based on the skills prioritisation mentioned in the job description. The system subsequently analyses the CVs to identify the psychometric profile of the candidate, using social media profiles and interaction.

4. First level interviews are conducted using a chat bot, either online using ‘free-text’ or via a video software such as Skype. The use of video analytics can gauge personality traits, and an interactive dashboard compares candidates’ traits and performances.

5. Following this, the AI system arranges and schedules meetings with the selected candidates and HR, through an automated email conversation. At this point, HR takes over.

AI is able to complete many more complex processes than RPA, and could revolutionise the way HR operates today. A collaboration between RPA, AI and people could result in an extremely efficient, cost effective and higher quality workforce and output.

It must be acknowledged, however, that AI would not be wholly appropriate for all roles, and that a certain amount of negatives, including the impersonal and arguably off-putting nature of being interviewed by AI, may be at play. These need to be carefully managed.
Where do we go from here?

It is clear that RPA stands to be a huge benefit to the future of HR. These repetitive, yet wholly vital processes that have been taking up valuable time and money will be completed in a much more cost effective, reliable and efficient manner.

As RPA undertakes the systematic and behind-the-scenes jobs, AI will complement the software to add thought, judgement and intelligence to HR, as well as other departments. AI is set to become increasingly prevalent and key to the way in which we do our work.

By embracing these new technologies, we can drive business performance and help move our people higher up the value chain. Understanding and utilising RPA and AI is a clear path to work towards a better working world.
Can Robotics unleash your workforce potential?

Automating routine tasks can allow your employees to focus on ideas, innovation and higher-value work.

The better the question. The better the answer. The better the world works.
Key contacts

Guy Heiser
Partner,
People Advisory Services,
EMEIA Robotics Leader

gheiser@uk.ey.com
+44 7951 8754

Sunil Mehta
Director,
People Advisory Services,
UK and Ireland Robotics Leader

smehta8@uk.ey.com
+44 7951 9332
**About EY**

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit ey.com.

**About EY’s People Advisory Services**

As the world continues to be impacted by globalization, demographics, technology, innovation and regulation, organizations are under pressure to adapt quickly and build agile people cultures that respond to these disruptive forces. EY People Advisory Services believes a better working world is helping our clients harness their people agenda – the right people, with the right capabilities, in the right place, for the right cost, doing the right things.

We work globally and collaborate to bring you professional teams to address complex issues relating to organization transformation, end-to-end employee lifecycles, effective talent deployment and mobility, gaining value from evolving and virtual workforces, and the changing role of HR in support of business strategy. Our EY professionals ask better questions and work with clients to create holistic, innovative answers that deliver quality results.

**Ernst & Young LLP**

The UK firm Ernst & Young LLP is a limited liability partnership registered in England and Wales with registered number OC300001 and is a member firm of Ernst & Young Global Limited.

Ernst & Young LLP, 1 More London Place, London, SE1 2AF.

© 2016 Ernst & Young LLP. Published in the UK.
All Rights Reserved.
ED D417