So will embracing robots mean replacing humans?

Automating routine tasks can allow people to focus on ideas, innovation and higher-value work.
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Robotic Process Automation (RPA)

Robotic process automation (RPA) is the application of technology that allows organizations to configure computer software to: capture and interpret existing applications for processing a transaction, manipulate data, trigger responses and communicate with other systems.

What is a robot in this context?

Whilst the term robot might bring to mind humanoids occupying your office space, more recently it has come to mean software ‘bots’ to enhance the productivity of your workforce. RPA takes a very different approach by incorporating:

- Configurable software
- Programs that relieve workforce from repetitive activities
- Sophisticated macros that can work in conjunction with other systems or software (complemented by Artificial Intelligence where relevant)

Why is RPA relevant?

Typical challenges faced by businesses:
- Labour intensive processes
- Dependency on multiple systems
- Processing errors
- Expensive human resource
- Regulatory pressure
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 is RPA applicable?

- Payroll and Benefits
- Time and Attendance
- Sourcing and On/off boarding
- HR Shared Services and HR Policies
- Learning and Development
- Data management and HR Analytics

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## How Robots can be used in Human Resources?

<table>
<thead>
<tr>
<th>HR Process</th>
<th>Illustrative Use Case</th>
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| **Data management** | **Automate management of business and people requests:**  
- Processing of multiple person, job data and position management administration requests across multiple systems in multiple formats (e.g. ESS, MSS, smart forms etc.)  
- Builds confidence in data accuracy, ensuring managers and employees own their person data  
**Remove processing delays:**  
- Manager and employee requests acted upon in real time therefore approvals are raised with immediate effect and system changes are made in real time, removing delays for users requiring data changes in place |
| **Payroll Reconciliation** | **Conduct standard payroll processing activities:**  
- Confirm that earning and deduction files are complete and request additional information for any incomplete files  
- Import earnings and deductions batch files into payroll system and initiate and review gross-to-net calculations  
- Review prior period reports for exceptions and escalate exceptions to designated reviewer  
- Close payroll and notify Treasury/Accounting & generate trial GL entries |
| **Onboarding** | **Assess, prepare and create new joiner data:**  
- Identify and review new joiner documentations, validate approvals and update system or tracker  
- Update new joiner person, job and organization data in core HR systems to create person ID  
**Streamline information across disparate corporate systems for preparation on Day 1:**  
- Trigger notifications to internal departments including IT, security and Payroll to initiate laptop requests, building access, payroll validation, line manager and third parties to commence background screening |
| **Termination** | **Consolidate leaver input from business areas and feed to downstream systems:**  
- Identify and synchronize data from various business units, accounting for variances (e.g. email notifications, online forms, self-service)  
- Update to leaver person, job and organization data in core HR systems, enabling notifications to line manager, payroll  
- Accelerated notification to security to remove corporate access to internal systems |
Examples of Quick Wins with RPA

**Data management and HR Analytics**
- Automated management of business and people requests
- Remove process delays
- Data cleansing activities to ensure consistency across multiple systems in various formats

**Sourcing On/off boarding**
- Assess, prepare and create new joiner data
- Streamline information across disparate corporate systems for preparation on Day 1
- Consolidate leaver input from business areas and feed to downstream systems
- Processing candidate notifications for interviews, rejection and feedback
- Candidate reviews - screening of CV’s and online application forms

- 65% Of cost savings compared to an offshore based FTE in Shared Service Center
- 80% Of cost reduction for processing payroll
- 65% Of HR rules based processes can be automated

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How can RPA support in processes?

**Current process:** Human work on interpretation and decision making, but also on tasks related to collecting, copying, checking of data files etcetera.

**Future process:** Humans and robots work together. Robots take care of repetitive data related tasks. Humans are involved in more complex tasks such as interpretation and decision making.

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<th>Time and Cost Savings</th>
<th>Other Benefits</th>
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<td>Time to process (on average): from 2 hours to 3 minutes once completed forms received</td>
<td>More flexible workforce resulting in happier and more productive employees</td>
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<tr>
<td>Cost to process (on average): a 50% to 70% cost reduction</td>
<td>Increased focus on value adding activities</td>
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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.
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.

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.
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 utilizing RPA and AI is a clear path to work towards a better working world.
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