Managing the people and change aspects of implementing Robotic Process Automation (RPA) in the workforce | *February 2016*

People, change... and robots

pwc

pwc.com.au/rpa

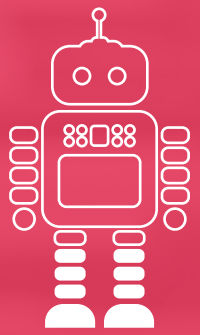
By revolutionising business processes and workflows, RPA offers a multitude of financial and non-financial benefits. However, most companies are concerned how their workforce will respond to RPA amidst fears over job loss.

This article explores the ways in which businesses can embrace technological innovations offered by RPA by engaging with their employees to create the organisational and cultural change needed to successfully adopt RPA into business-as-usual operations.

RPA – coming to a job near you?

As companies seek to digitise their operations, mature business processes and meet changing metrics, RPA is gaining interest globally as the preferred option over traditional avenues such as business process remodelling, application programming interfaces (API) and offshore/onshore manual processing due to the relatively low cost and ease of implementation.

Previously automation had been seen as the domain of administrative, manufacturing, labour and service-based work. Current research and statistics indicate that RPA is increasingly transforming knowledge-based, professional service jobs. Forrester predicts that 25% of tasks across every job category will be automated by 2019.[1] The magnitude of change caused by digital disruption as a whole is even greater – it is expected to affect 44% or 5.1 million Australian jobs in the next 20 years.[2]



25%

of tasks across every job category will be automated by 2019.

As shown in Table 1 below, forecasts indicate RPA will transform up to 60% of work tasks in the management, business and financial sectors; 48% in the professional sector; and up to 41% in sales by the year 2020.[3]

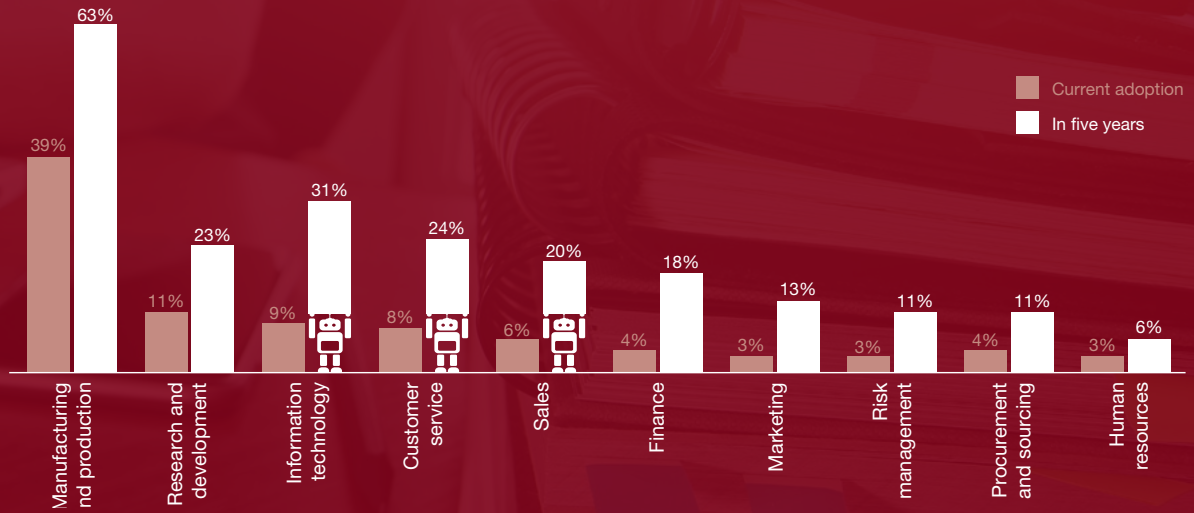
Table 1: RPA and the rate of job transformation[4]

	2015	2016	2017	2018	2019	2020
Management business and financial	9%	19%	29%	40%	51%	64%
Professional and related	8%	17%	27%	37%	48%	60%
Sales and related	7%	14%	23%	32%	41%	52%
Office and admin support	7%	15%	23%	32%	42%	52%

Figure 1 below shows how the manufacturing and production, IT, customer service, finance and sales functions face the most rapid changes from robotics in the next five years.[5]

Figure 1: Robotics and industry impact[6]

Role of robotics in IT, customer service and sales to grow significantly



It is clear that neither the business benefits nor the workforce impacts of RPA can be ignored. Businesses need to embrace the technological innovation and potential for transformation, and consider how to successfully integrate RPA into operational business processes.

Transforming rather than replacing roles

The business case for the implementation of RPA is well substantiated. However, most companies are concerned about how to integrate it successfully, and in particular, whether it will be accepted by their staff. Since RPA replicates manual, customer service and cognitive tasks, most of the barriers to adoption relate to fears that it will make existing employment roles redundant.

Fear of the impact of technological innovation on job security is nothing new. In the 1930s, economist John Maynard Keyes coined the term 'technological unemployment' to refer to the potential of technology to displace jobs.[7] However, fear of technological unemployment fails to recognise that while technological innovation makes some job roles redundant, it creates new jobs and changes the nature of existing ones.

Although RPA will certainly cause some form of economic and employment disruption, especially for lower-order tasks, this disruption does not necessarily equate to unemployment. Businesses must help their employees prepare for this technological disruption by educating employees on the benefits, impacts, use and limitations of RPA.

The reality vs the science fiction

When statistics on RPA are viewed in isolation, they can create misunderstandings around the uses and impacts of RPA. For example, there are different types of RPA, which vary in both maturity and capability. Forrester describes three key stages of RPA: **Level 1 – Basic Digitisation; Level 2 – Enhanced Digitisation;** and **Level 3 – Cognitive Decision Management.**[8]

At stage one on the maturity scale, RPA focuses on quality and testing, desktop consolidation, document workflow, task scheduling, data entry and so on, using a set of static rules. At stage two on the maturity scale, RPA starts analysing unstructured data and identifies speech tagging and sentence segmentation using analytics and language processing. At the third stage of automation, RPA can enable a machine to start using external knowledge to perform more human-like decision-making.[9]

RPA has the potential for much more rapid digitisation. In fact, at the third level, artificial intelligence is emerging in RPA toolsets which use basic sentiment analysis, enabling the robot to decide an action based on the sensed mood of the user. However, it should be noted that extensive machine training and input as well as large data sets are required to progress to the third level.

Currently, RPA can plug into and transform existing business processes but cannot completely replace humans.

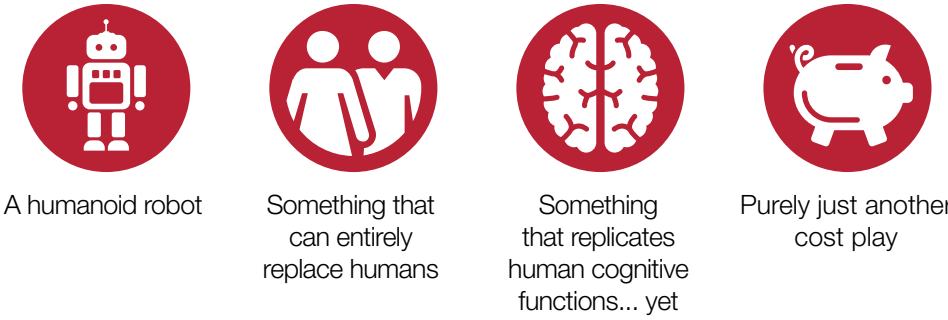
Misunderstandings about RPA stem often arise from confusion around what RPA is, and what it is not.

Figure 2: What is RPA?

Robotic process automation is:

Figure 3: What isn't RPA?

Robotic process automation is not:



Adopting RPA without alienating the workforce

In order to increase acceptance and adoption of RPA into operational processes, effective change management and communication strategies that ensure workers understand the facts and benefits of RPA are essential.

In discussing RPA, it is important to acknowledge that some jobs and employment roles might be affected, for example, help desk, insurance and loans processing, data entry, data assembly and formatting based roles. Some of these roles may be automated entirely, while others will only be impacted at defined workflow stages. It is vital to reiterate that tacit knowledge, analysis and judgment skills cannot yet easily be codified or made into an algorithm. Collaboration between human operators and RPA will streamline and improve existing processes. Further, new job roles will be created by the need for RPA programmers.

The potential of RPA to disrupt traditional workflow processes does not undermine the multitude of employee benefits that RPA offers. It should be emphasised to staff that RPA enables employees to focus on the more interesting and challenging higher order tasks, rather than monotonous and administrative processes. The process changes created by RPA will allow organisations to focus on more strategic projects that better meet their changing needs.

The following are the key benefits to the majority of employees:

- scope to focus on higher order, more complex, intelligent tasks
- outsourcing monotonous, manual and repeatable tasks
- simplifying workflows and expediting processes.

RPA doesn't solely reduce work – it can create new types of work in the form of RPA programming, new workflows, processes, metrics and support to enable the business to get the most benefits from an RPA implementation.

Bringing the workforce along for the ride

In the ongoing race to deliver increased productivity and market differentiation, organisations are prioritising systems, tools, processes and people in different ways. Most organisations are realising they can't achieve 2020 results if they are working in a 1990s paradigm.

For effective deployment and adoption of RPA in the workplace, businesses need to create a strong strategy that addresses the impact of business change on organisational culture.

In addressing the changes to the organisational culture, one of the key questions businesses need to ask is: *how do we help knowledge workers shift to new, efficient ways of working in a constantly changing environment?* Processes and systems can enable market differentiation, but they aren't differentiation on their own. We have found that an approach that focuses on behaviours, physical environments and technology will lift and sustain worker productivity, including:

- stakeholders being clear on the business strategy and the required values and behaviour that align with the strategy
- creating a work environment that drives productivity and addresses the needs of knowledge workers
- an integrated approach to getting people engaged, aligned, thinking and behaving productively
- empowering people with the latest technology so that they bring the best to every interaction and moment.

Once the organisational culture element has been addressed, it is important to evaluate the change management, communications and messaging, and learning and development frameworks that are in place to support the business and process changes. Some of the key steps of adopting RPA into operational processes include: collaborating with employees to identify all possible affected workflows and processes; communicating with staff about the scope, uses, benefits and limitations of RPA; training staff in the new skillsets, processes and tools; and monitoring employee feedback and behaviour post-deployment for continual improvement and reinforcement of the process changes.[10]

How we can help

Our experience shows that in most cases, employees will eagerly embrace process change where it is shown to enhance their careers. We recommend a holistic approach that considers RPA as much more than a technology automation strategy, instead being managed as you would other strategic programs.

PwC can work with your organisation end-to-end throughout the implementation of RPA, including both the technical implementation and business process transformation, as well as managing the impacts on organisational culture, change management, communications and learning and development. This combined approach will ensure that the business benefits are realised and RPA practices are successfully integrated into the business.

RPA is an exciting revolution in the workforce, which can dramatically benefit both the corporation and the employee. It is a revolution that is 'creating new jobs to offset more than half the human jobs it eliminates, and one in which job transformation is the most compelling element'.[11]

Find out more about Robotic Process Automation by contacting us:

Shane O'Sullivan
+61 (3) 8603 5333
shane.osullivan@pwc.com

Steven Rayment
+61 (2) 8266 1891
steven.rayment@pwc.com

Felicity O'Shannassy
+61 (3) 8603 5816
felicity.oshannassy@pwc.com

Shereen Boland
+61 (3) 8603 1840
shereen.boland@pwc.com

*Visit **pwc.com.au/rpa** regularly to read our latest thinking on Robotic Process Automation*

Endnotes

1. See Forrester report, J. P. Gownder et al., August 24, 2015, 'The Future Of Jobs, 2025: Working Side By Side With Robots', paragraph: 'Jobs Transformed: By 2019, Robots Will Change 25% Of Every Job Category'.
2. PwC Australia, Heather Gilmore, 'Demand for Stem Skills Will Generate The Next Wave of Growth', http://www.pwc.com.au/press-room/2015/stem-skills-apr15.html.
3. See Forrester report, J. P. Gownder et al., August 24, 2015, 'The Future Of Jobs, 2025: Working Side By Side With Robots', paragraph: 'Jobs Transformed: By 2019, Robots Will Change 25% Of Every Job Category'.
4. Ibid.
5. PwC USA, Jon Andrews et al., 'Pulse on Robotics', http://www.pwc.com/gx/en/ceo-agenda/pulse/robotics.html.
6. Ibid.
7. *The Economist*, August 15 2015, 'Automation Angst', http://www.economist.com/node/21661017.
8. See Forrester report, Craig Le Clair et al., November 23 2015, 'The State of Robotic Process Automation', paragraph: 'RPA is struggling to meet cognitive potential'.
9. Ibid.
10. See Forrester report, J. P. Gownder et al., August 24, 2015, 'The Future Of Jobs, 2025: Working Side By Side With Robots', paragraph: 'Develop a strategic plan for workforce automation'.
11. Ibid – paragraph: 'Robots will drive a social revolution – but not the one that we fear'.

127036362