

Relentless pressure is forcing organisations to push beyond traditional operational strategies | *October 2016*

# *RPA and your digitisation strategy*





Technology is continually evolving and new innovations are transforming the way customers interact with businesses and consume products and services. Customers expect always-on, real-time service, and increasing shareholder demands, low-growth environments and growing input costs are common themes across virtually every sector. As a result, there is enormous pressure to improve operational capabilities while reducing cost.

Traditional operational strategies are maturing and offer less in the way of future benefits. The main strategies that have been tried include:



Automation through core systems upgrades, which has proven costly, risky and time consuming



Outsourcing and offshoring, which has delivered labour cost arbitrage but has involved complicated transition arrangements



Re-structuring and process re-engineering: where most companies have had initiatives in place for years



**72%** of organisations globally expect to achieve advanced levels of digitisation by 2020\*

\*See PwC 2016 Global Industry 4.0 Survey: Industry 4.0: Building the digital enterprise, 2016

Each of these strategies has limitations or is reaching a point of diminishing returns. Most businesses now aspire to end-to-end digitisation of processes in order to increase competitiveness and respond to customer demands. This is particularly salient given that customer engagement now transcends traditional channel boundaries that would have previously required a human intermediary.

Throughout the digitisation process, businesses need to balance innovation and quick response to 'business moments' with maintaining the stability of existing IT operations. This is what Gartner calls the 'Bimodal IT' model.<sup>1</sup> Maintaining Bimodal IT is crucial, as, while digitisation creates vast customer experience and service benefits, it also poses inherent security risks.

<sup>1</sup> See Gartner report, Tom McCall, 'How to Innovate with Bimodal IT', 18 February, 2015, [www.gartner.com/smarterwithgartner/how-to-innovate-with-bimodal-it/](http://www.gartner.com/smarterwithgartner/how-to-innovate-with-bimodal-it/)



## *Digitisation is a logical and necessary next step*

Digitisation encompasses 'the process of moving from analog to digital form'.<sup>2</sup> Digitisation is the only way to meet the greater demand for real-time fulfilment, 24/7 availability, a personalised consumer experience, greater accuracy, predictive data, faster processing and improved customer identity management. The digital landscape spans the use of channels such as websites, social media, mobile apps and so on to enable a more digitised, interactive and improved experience. Digitised work is also quicker, cheaper and more reliable than manually processed work, regardless of whether it is insourced, outsourced, or executed on a perfect manual process.

The ultimate goal is to digitise the majority of a company's processes, only relying on people where person-to-person contact adds value, or to bring cognitive and innovative capabilities that technology cannot substitute. That still leaves enormous scope for digitisation; estimates suggest around 45 per cent of current manual work is able to be digitised.



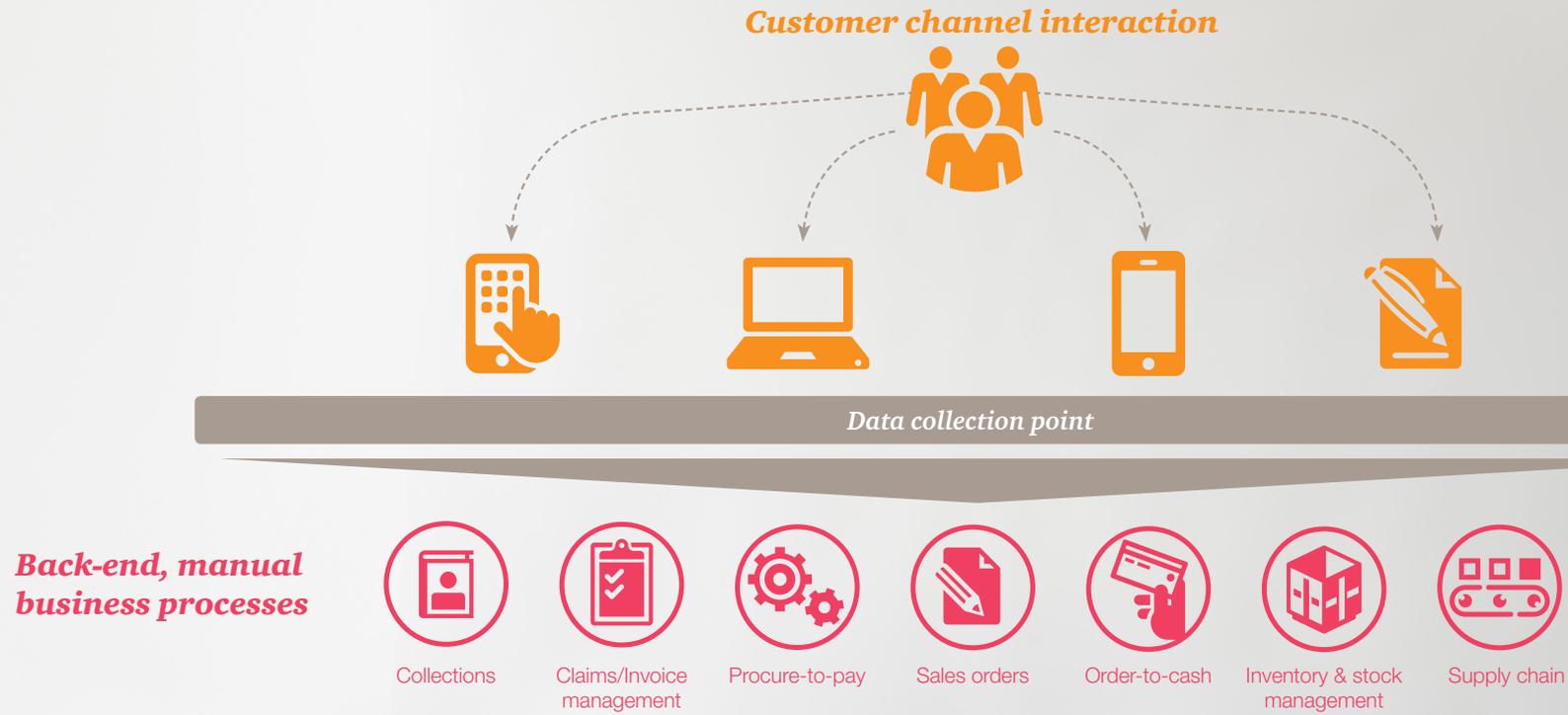
Companies will see cost savings of more than **30%** across key RPA-centric functions such as finance and accounting, human resources and supply chain, within the next one to two years.\*

The problem is that technology has struggled to keep pace with business needs and change. This has resulted in large functional gaps in many organisations' systems which have had to be filled by manual work. In addition, many organisations that make digital initiatives a priority fail to consider how back-end operational processes affect the customer experience. In implementing an effective digital strategy, businesses need to be aware of, and address, both the digital customer experience as well as the digital operational experience.

<sup>2</sup> Gartner IT Glossary, <http://www.gartner.com/it-glossary/digitization/>

\* See Mindfields report, Research Report on Robotics and Process Automation, 2015

Figure 1: Customer channel interaction and back-end processing – although they are part of the end-to-end process, back-end functions tend to be overlooked within the digitisation strategy



## Robotic Process Automation is a growing solution to this problem

In the absence of straight through processing (STP) via core systems, businesses still need to consider an effective automation strategy – especially in complex and distributed technology environments. Robotic Process Automation (RPA), software that mimics the actions and keystrokes of people executing manual processes, is a growing solution to this problem. RPA software is a non-intrusive technology that does not require integration like other technologies (e.g. ERP systems and BPM). It manages this by using systems' presentation layers, or the screens and reports presented to users, to access them and complete work. As a result, RPA technology is fast and agile to deploy and can rapidly fill holes that current systems leave or projects find costly to address.

RPA has been termed 'the Fourth Industrial Revolution' because of the dramatic improvements it makes on operational processes.

For example:

<b>Cost:</b>	RPA runs at ~33% of the cost of an offshore resource and ~10% of an onshore resource.*
<b>Quality:</b>	RPA can reduce error rates to virtually zero.****
<b>Flexibility:</b>	Robots can run 24/7 and scale up and down to accommodate spikes in work.**
<b>Risk:</b>	Consistent execution of processes translates into lower operational risk.**
<b>Processing time:</b>	RPA can reduce time to execute a process from days and weeks to minutes and seconds.****
<b>Rol</b>	Returns of over 300% are common for RPA implementation.****
<b>Implementation speed:</b>	Typical processes can be automated in days to a few weeks.**

\* Everest Group Finance and Accounting Outsourcing Annual Report 2014

\*\* PwC report - Organize your future with robotic process automation, 2016

\*\*\* PwC Experience & ROI Case Study – Cerner, Automation Anywhere (>600% ROI)

\*\*\*\* London School of Economics Outsourcing Unit Research Paper Series - Robotic Process Automation at Xchanging, 2015

The benefits are so substantial that many organisations are completely re-thinking their operating models and outsourcing strategies.



PwC estimates that **45%** of work activities can be automated, and this automation would save **\$2 trillion** in global workforce costs.



## *RPA as part of a broader digitisation strategy*

Without doubt, RPA is a very powerful, high-ROI tool that produces quick (and potentially significant) productivity wins in complex systems and process environments that are resistant to fundamental change. However, it is not a silver bullet. There are several situations that would limit its benefit:

Areas where high personal contact is needed (e.g. more complicated sales environments or complaints/case management)

Areas where cognitive learning is required (though RPA platforms are gradually incorporating cognitive learning into their functionality)

When major, near-term change to underlying systems is needed (e.g. major version upgrades or regulatory changes)

Dealing with paper or unstructured data (though some platforms can cope with these challenges).





These situations don't rule out RPA, but they do demand careful consideration of whether and how it should be applied. The choice of solution should be made consciously and factor in longer term implications such as vendor dependency, resource availability and control. Often, a smart combination of instruments such as a combination of RPA-based automation and other technologies provides the best and most sustainable outcome.

The solutions chosen must also align with process improvement frameworks (such as Lean), in order to ensure a stable and predictable process result, as well as defined, measured, analysed, improved and controlled processes that deliver clear business value.

# 68%

*of organisations in the Asia Pacific region expect to increase efficiency by more than 20% over the next five years\**



\*See PwC 2016 Global Industry 4.0 Survey: Industry 4.0: Building the digital enterprise, 2016

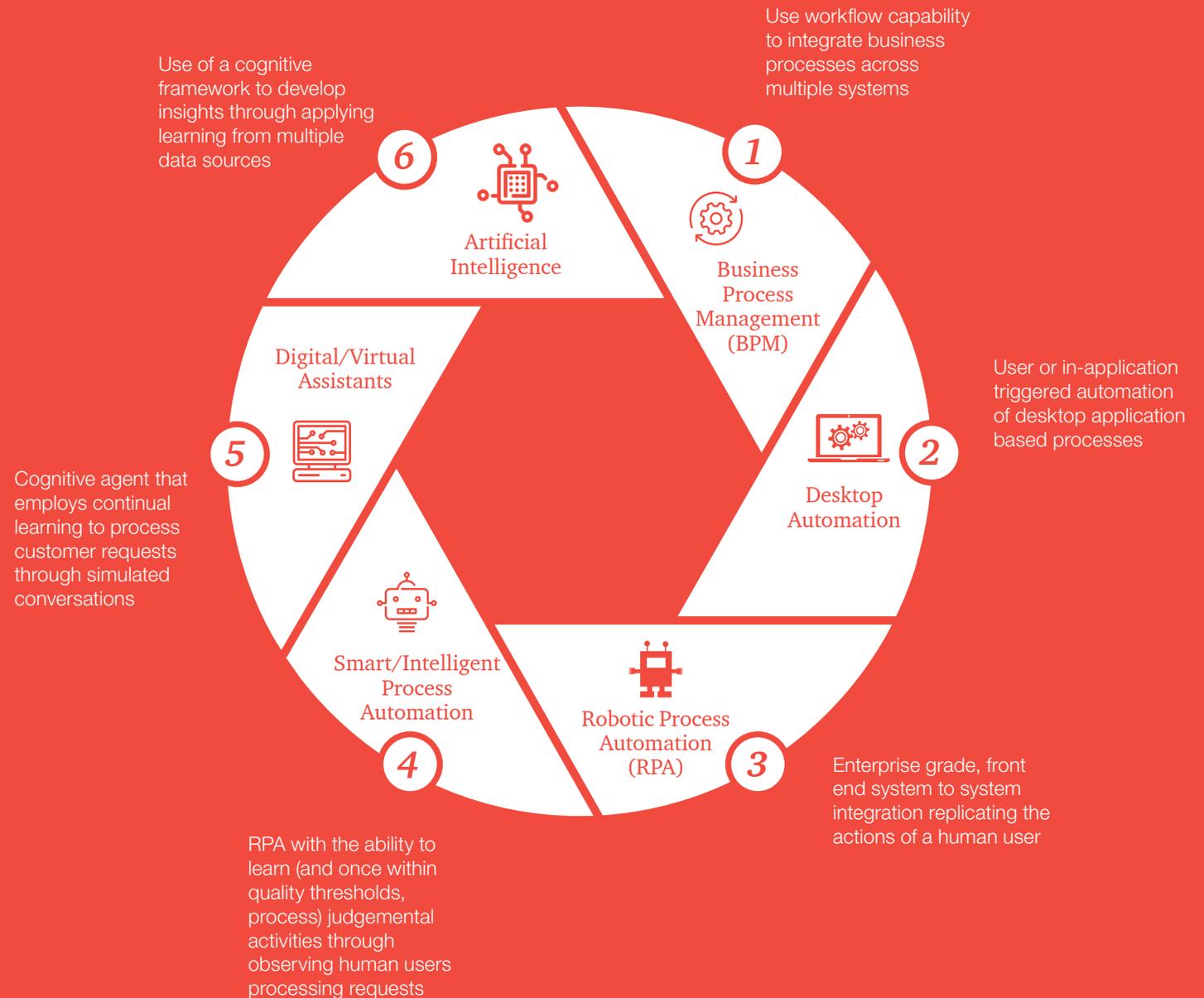
## Where does RPA sit on the automation agenda?

The different options for automating operational processes need to be considered based on an assessment of the business needs and the operating environment. Automation tools range from simple applications used to automate minor processes (basic scripting) to tools applying artificial intelligence (cognitive decision management) to manage processing, with RPA tools in the middle of the spectrum providing broad business application (enhanced digitisation).

As described above, RPA should be considered in conjunction with, or as an interim step towards, a range of other digitisation options, as part of a broader digitisation strategy.

Figure 2 demonstrates the range of automation options that should be considered in parallel to RPA, ranging from Business Process Outsourcing at the most basic level, right through to Algorithmic Business at the more advanced level. These are not stages to 'progress' through – rather, each option should be considered in terms of its fitness for the task.

Figure 2: Process automation options



## Considerations for a digitisation strategy

Given that RPA can automate approximately 45 per cent of manual work currently being conducted, it has tremendous scope within a digitisation strategy.

There are two levels of consideration for developing this strategy:

- **Direction setting:** What are the major instruments that I want to employ for digitising my organisation? For example, a strategically important business process might be digitised by an organisation to retain control and IP, while a less strategically important process (e.g. payroll) might be outsourced to a third-party provider to take advantage of their scale.
- **Solution setting:** Focusing on internal processes, the solution is often an amalgam of technologies.
  - This could be a combination of natural language processing (NLP) and RPA technologies to tackle more complicated issues. For example, the application of sophisticated NLP platforms to interact with customers paired with RPA platforms to execute on tasks.
  - Secondly, where work is suited to RPA, different vendors have different strengths. Having a clear understanding of how different RPA vendors align with your organisation is critical to maximising the RPA opportunity and ensuring long-term sustainability.



Figure 3: RPA deployment considerations



## Necessary considerations to successfully deliver RPA

Many organisations start RPA with a Proof of Concept (PoC) and enjoy a taste of its speed and productivity benefits. This can draw organisations into setting up an RPA programme which is simply a continuation of their PoC at a larger scale. Invariably, this results in issues as strategic considerations, such as how to realise benefits, RPA's impact on the workforce and its fit with IT strategy, aren't properly addressed.

Figure 3 outlines a range of considerations to be taken into account when starting to implement RPA at scale. Practically, after an initial PoC a mobilisation exercise to identify priority opportunity areas, address strategic issues and establish necessary build and run capabilities should be undertaken. Interestingly, many organisations struggle with the business-led, potentially agile approach to implementing RPA. Many of the issues addressed by an RPA programme can benefit other programmes that want to run agile practices.

There are two other ways that RPA can create benefits whilst not part of a long-term solution for an organisation. Firstly, some projects can use RPA to help introduce efficiencies. For example, if a project involved reviewing and potentially remediating

many transactions or customer cases then a robot work force could be a faster, more efficient solution than manual reviews.

Secondly, RPA can be used as a productive transition to a longer term system upgrade. For example, an ERP upgrade is a costly and resource intensive exercise. Many organisations will look to defer these costs until absolutely necessary but may miss out on automating new processes or regulatory requirements. RPA can provide a productive way to design and document requirements, and put in place an interim digitisation solution that can be shut down in as little as 12-18 months. The design documentation for the RPA can be used as input to the ERP upgrade. Short-term benefits are delivered and the costs of an ERP upgrade can be deferred and potentially made more efficient.

In all of these examples, a good decision-making capability around Enterprise Architecture is critical. RPA is a very good option but must be considered alongside other solutions. Your Enterprise Architecture option also needs to be across roadmaps for RPA vendors as new functionality is rapidly adopted.

# Automation Centre of Excellence

It is vital to have a rigorous framework in place to ensure that the selection, implementation and running of automation is executed successfully.

We recommend the Automation Centre of Excellence (CoE) methodology, which takes into account the holistic impacts of transformation on customers, employees, improvement frameworks, automation strategies, data and analytics, risk and cybersecurity, operations and technology considerations. It is underpinned by sound governance and process management, as well as development, maintenance and support of the RPA software itself.

The Automation CoE methodology will ensure the change is executed well, improvements and benefits are measured, risks are mitigated and continually monitored, and the implementation aligns to customer strategy and enhances the customer experience. Figure 4 depicts the Automation CoE framework.

Figure 4: Automation CoE framework





## *How we can help*

PwC has extensive RPA experience across sectors including Financial Services, Retail and Consumer, Government, High Technology and Utilities. We look to work with clients who don't want to simply 'throw robots at processes'. We bring both RPA expertise and a broader perspective. This can include:

- **Strategy:** Ensuring that RPA is incorporated into an organisation's strategy and aligned to key elements including operating model, IT, workforce and risk.
- **Opportunity assessment:** Considering benefits beyond simple cost reduction. Understanding how RPA can benefit customer experience, revenue growth, risk mitigation and operational agility.
- **Deployment:** Bringing a range of RPA-specific lessons, for example:
  - governance models
  - agile work practices
  - integrating process, risk and customer experience into RPA design
  - Automation Centre of Excellence delivery
- **Sustainability:** Extending our support to managed service options for RPA.

Visit [pwc.com.au/rpa](http://pwc.com.au/rpa) regularly to read our latest thinking on Robotic Process Automation

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