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**The robots are here**  
Meet your digital workforce

A Deloitte report

## **Definitions**

For the purpose of this report, Robotic Process Automation (RPA) is defined as software (commonly known as a 'robot') used to capture and interpret existing applications for the purpose of transaction processing, data manipulation and communication across multiple IT systems.

Shared services is a model for the consolidation of back-office processes and business support services. Services are then delivered back to the organisation in an efficient and cost-effective way with a commercial focus (for example, with defined service levels and associated pricing). Shared services are typically function-specific (for example finance or HR) e.g. exclude operations. Global Business Services (GBS) is the grouping of different functional services into a single organisation or network which employs a common approach, a common infrastructure and governance.

Enterprise Resource Planning (ERP) is a software, or a suite of integrated applications that is used to collect, store, manage and interpret data from business activities.

## **Methodology**

In July 2016, Deloitte asked its global clients to take part in an online survey on the subject of RPA in their operations.

In this publication, references to Deloitte are references to Deloitte LLP, the UK member firm of DTTL. This information was analysed in aggregate and by key dimensions

# Foreword

Welcome to the 2016 Deloitte report examining Robotic Process Automation (RPA) and its role in shared services and Global Business Services (GBS). This is a follow up to our 2015 report titled *The robots are coming* in which we concluded that implementation of robotics was in its infancy but worth investigation due to its ability to improve efficiency and reliability. None of the organisations we surveyed a year ago had yet adopted RPA.



**Nick Prangnell**  
GBS Consulting Lead

Our recent online survey finds there has now been a sharp increase in the number of organisations that have investigated RPA and that a significant number of organisations have already implemented or piloted RPA. The increase we have observed in companies investigating and implementing RPA seems set to continue; with positive feedback on the speed with which RPA can be implemented and the payback that can be achieved.

From our perspective, RPA is an innovation that will transform the landscape of transaction processing. The advantages of RPA include the speed and simplicity with which it can be implemented, as well as its scalability and rapid payback periods. However, the profound value is in the potential of RPA as a digital workforce enabling shared services to deliver higher quality at a lower cost. From this perspective we believe RPA warrants full investigation and consideration in shared services and GBS operations.



**David Wright**  
GBS Robotic Process Automation Lead

With RPA it is possible to start small and test the concept with incremental steps. But the significant benefits that robotics could unlock when applied across multiple functions and processes, means organisations should think big – bigger in fact than the shared services or GBS organisation.

This Deloitte report will help shared services and GBS leaders acquire more clarity about the potential of RPA. It will also provide examples of how RPA is currently being employed as well as the experiences of organisations with this technology.

We would like to thank the executives who participated in our survey. We hope you find our insights thought-provoking and useful, and we welcome the opportunity to enter into further discussions on this topic with you.

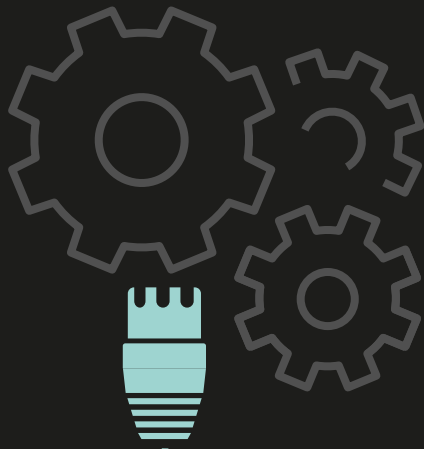
A handwritten signature in black ink, appearing to read 'N. Prangnell'.

**Nick Prangnell**  
GBS Consulting Lead

A handwritten signature in black ink, appearing to read 'D. Wright'.

**David Wright**  
GBS Robotic Process Automation Lead

[deloitte.co.uk/rpa](http://deloitte.co.uk/rpa)



Robotics Process Automation is now a **viable, proven solution for Shared Services and GBS organisations**: while only

**9%**  
have actually implemented RPA

**74%**  
of survey respondents plan to investigate the technology in the next year.

RPA **meets or exceeds expectations** in terms of **financial benefits delivery** – and reality tends to **outperform expectations** even further with non-financial benefits

like **accuracy, timelines** and **flexibility** – but some organisations have been disappointed with RPA implementation costs and delivery timescales.









### Defining Robotic Process Automation

Robotic Process Automation (RPA) is a way to automate repetitive and often rules-based processes. These kinds of processes are typically performed within a back-office function and often within a shared services or Global Business Services (GBS) operation.

RPA software, commonly known as a 'robot', is used to capture and interpret existing IT applications to enable transaction processing, data manipulation and communication across IT systems. Multiple robots can be seen as a virtual workforce – or a back-office processing resource which may sit alongside an existing team. To make them a more tangible part of the delivery team some organisations have given their robots names and one organisation has even devoted physical desk space in their office to to give its robots visibility.

RPA robots undertake transaction processing just like their human counterparts and can work on multiple processes, across multiple functions. For example, they can process Finance cash postings in the morning, work on an HR leavers process in the afternoon, and then run a master data set up process through the night. The robots typically use a 'virtual machine' and dedicated logins to interact with different applications and systems in the same way as human teams.

Robots are	Robots are not
 <p>Computer coded software.</p>	 <p>Walking, talking auto-bots.</p>
 <p>Programmes that replace humans performing repetitive rules-based tasks.</p>	 <p>Physically existing machines processing paper.</p>
 <p>Cross-functional and cross-application macros.</p>	 <p>Artificial intelligence or voice recognition and reply software.</p>

There are mixed views as to whether the terms 'robots' or 'robotics' are helpful. Some people feel the terms are misleading and are more suited to the mechanical types of robots. Others feel they relate more to artificial intelligence and cognitive applications. Our view is that RPA as a term is helpful in that it describes the robotic or rules based nature of the processes that are suitable for automation. In this context the concept of a software robot helps people to see this as a digital workforce rather than simply implementation of a new software.

# RPA in 2016: A viable solution but still in its infancy

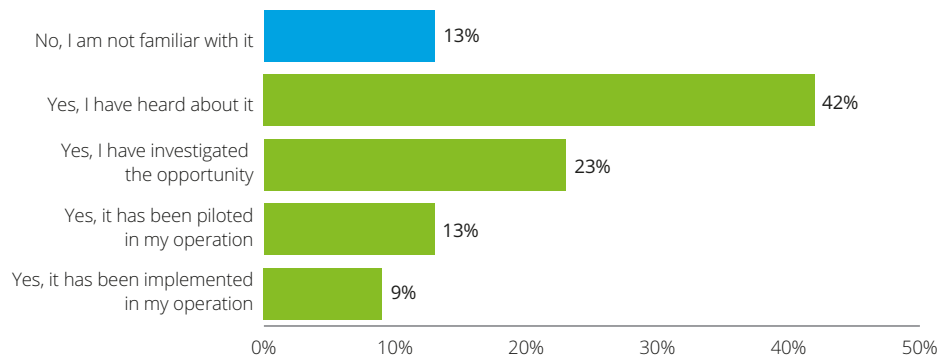
- Awareness and experience of RPA is greater in 2016 than 12 months ago.
- Growing awareness has not yet tipped the scales in terms of numbers implementing – with 22 per cent of survey respondents having implemented or piloted robotics.
- There continues to be a lack of clarity around the investment required to get RPA up and running with the most basic transactional activities.

## Awareness of RPA

In 2016, Deloitte carried out a survey of 143 shared services and GBS leaders from around the globe as a follow up to our 2015 survey, 'The robots are coming'.

Respondents' visibility regarding RPA has increased in the last 12 months, with only 13 per cent of 143 respondents now saying that they have not heard about RPA, compared to 30 per cent last year who knew little or nothing about it. The number of companies who have implemented RPA has also increased. In addition, a significant number of companies have now begun to use RPA. In 2015, none of our respondents had implemented RPA. This year, 32 respondents – 22 per cent – reported that they have piloted or fully implemented it. While a significant rise, this is still perhaps not the dramatic increase that might have been expected given the media hype surrounding RPA and indeed the interest at the 2015 Deloitte Shared Services, GBS & Business Process Outsourcing Conference.

**Figure 1. Are you familiar with RPA?**

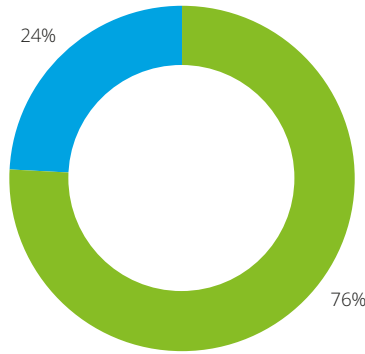


Source: Deloitte analysis

n=143

Our view is that the gap between those that have heard about RPA and those that have implemented will fall over the next 12 months given that 76 per cent of respondents claim they plan to explore the potential of RPA in the coming year.

**Figure 2. Do you plan to investigate the RPA opportunities for your operation in the next year?**



■ Yes ■ No

Source: Deloitte analysis

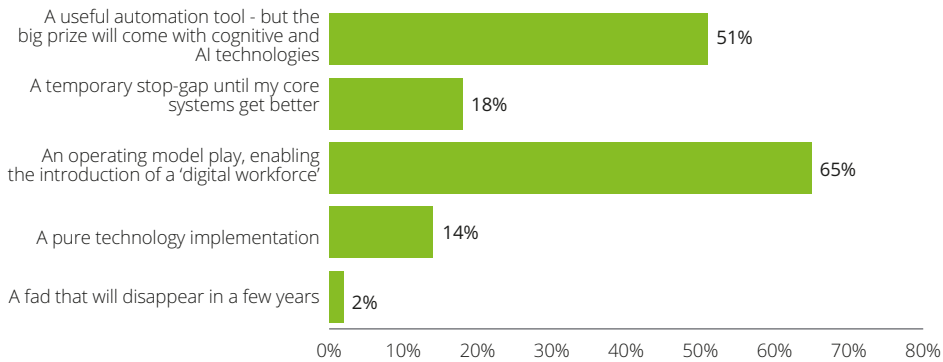
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**Perceptions of RPA**

Shared services and GBS leaders surveyed feel better informed about RPA than 12 months ago, with 65 per cent of respondents this year viewing RPA as a potential operating model play – a digital ‘workforce’. Just over half also see RPA as useful, but not as big a disruptor as future cognitive and Artificial Intelligence (AI) technologies. Very few respondents saw RPA as a fad created by media hype and likely to disappear.

**Figure 3. How do you see RPA?**

*(More than one answer selected)*



Source: Deloitte analysis

n=125

**When could RPA be relevant to me?**

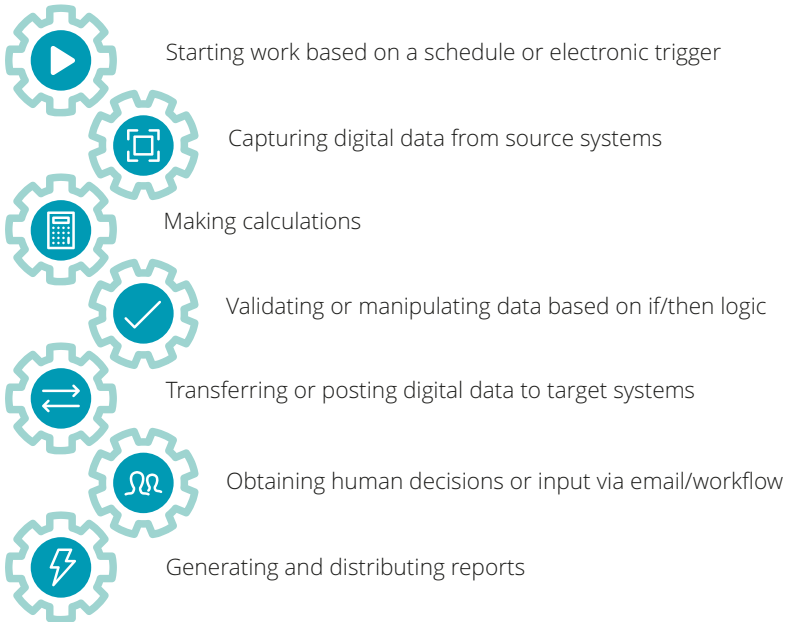
RPA has relevance across the complete range of system, process and operating models. With more mature operations the benefits are likely to be less extensive. Deloitte has implemented RPA in its own shared services, where it has the advantage of single instance Enterprise Resource Planning (ERP) and optimised processes, and it still delivered benefits.

Likely to see immediate and significant improvements from RPA	Likely that RPA could help optimise the operation
<input checked="" type="checkbox"/> Multiple ERP systems with multiple work-arounds (or pre-upgrade/consolidation)	<input checked="" type="checkbox"/> Single instance ERP
<input checked="" type="checkbox"/> Significant levels of manual processing and exceptions	<input checked="" type="checkbox"/> Optimised processes
<input checked="" type="checkbox"/> No shared services or immature shared services	<input checked="" type="checkbox"/> Mature shared services with offshoring/outsourcing

Wherever you have humans doing rule-based transaction processing there is an opportunity for RPA. In an environment where a company has multiple ERP systems, work-arounds and a significant level of manual processing and exceptions, there is typically a very strong business case for RPA.

**Where RPA does well**

RPA has a number of core capabilities or functions, outlined below:



A RPA assessment needs to look at the range of opportunities across which RPA could be implemented – rather than judging the automation potential simply by a single function or process. There are likely to be opportunities to employ RPA across multiple functional processes, e.g. Finance, HR, Operations, IT, etc, particularly where there are humans doing rule-based transaction processing. RPA will be most powerful when used across multiple processes.



### Benefits of RPA

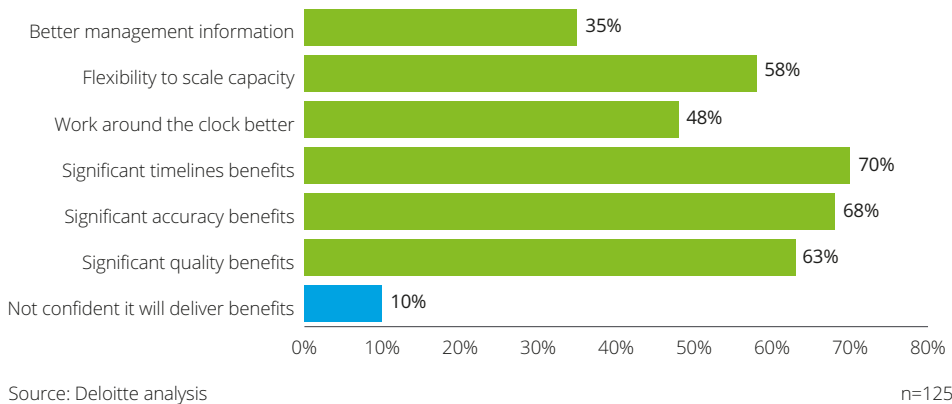
Of the respondents who have implemented or piloted RPA, a full 100 per cent were confident that RPA can deliver financial benefits. Of those that have implemented, the average estimated overall cost reduction in their operation from RPA was 16 per cent. Respondents that have already investigated RPA are also confident about the potential financial benefits, with 82 per cent believing it could deliver significant improvement. This strongly suggests that in 2016-17 there may be a sharp increase in the number of companies that move forward with a pilot or full implementation of RPA.

**Figure 4. Do you think RPA could deliver significant financial benefits (efficiency) for your operation?**



In terms of non-financial benefits, accuracy, quality and timeliness improvements were consistently reported as advantages of RPA, along with flexibility to scale up capacity in the future. This suggests that the perceived expectations in terms of non-financial benefits (among those who have investigated RPA) and actual benefits are aligned.

**Figure 5. Do you think RPA could deliver significant non-financial benefits for your operation?**  
(More than one answer selected)



### Non-financial benefits of RPA

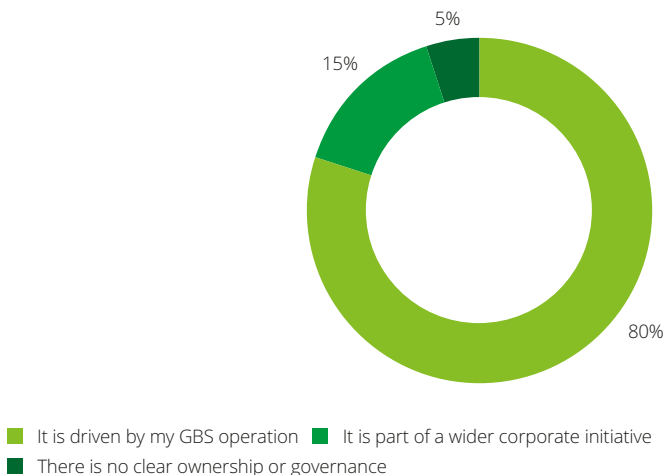
Here are some specific examples of benefits organisations have achieved as a result of implementing RPA:

- A major bank delivered a reduction in error rates from 30 per cent to almost nothing for a highly data-intensive process.
- A professional services firm delivered improved turn-around times for standard management reports thanks to overnight processing of files by RPA.
- A financial services company was able to run a checking process each night rather than once every two weeks which removed a small percentage of cases from the work stack. The cost of doing this daily with humans would have been prohibitive but with RPA it delivered a worthwhile marginal gain.
- A professional services company delivered improved management information that enabled it to understand their Key Performance Indicators better and communicate more positive and constructive messages to its customers.

### Who should own RPA?

RPA – like any resource – needs to be owned and managed in order to be exploited to its full potential. Over 80 per cent of respondents indicated they are driving the exploration and implementation of RPA from their operation rather than it being driven at a corporate level. Shared services and GBS organisations are a good home for RPA because they have deep experience in continuous improvement, standardisation of processes and the adoption of automation technologies. We see that RPA offers shared services and GBS organisations the opportunity to act as a ‘good corporate citizen.’ They can trial this technology with a view not only to rolling it out within their operation but also with the aim of demonstrating the potential for RPA across the wider organisation and possibly supporting or enabling implementations elsewhere in the enterprise. RPA will deliver most value when applied across multiple processes and functions.

**Figure 6. Is the RPA initiative driven by your own operation or part of a bigger initiative within your organisation?**



Source: Deloitte analysis

n=61

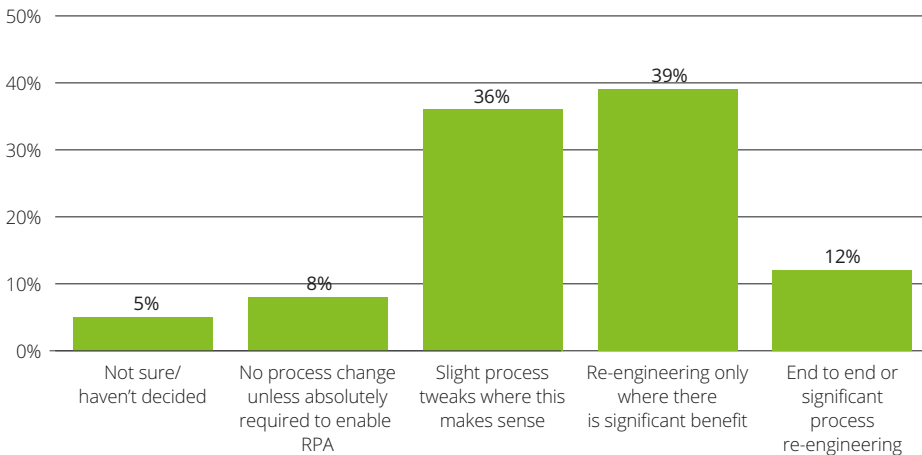
As RPA is effectively a layer of the operating model, we think it makes sense for the implementation to be driven at an operation level rather than it being driven across the whole corporation by one single team. This allows more ownership and tailoring of the implementation. Of course, the lessons learned can be shared across the corporation. Vendor negotiations will benefit from increased scale, and delivery skills can be housed in one location. These are areas in which GBS or shared services functions can lead.

**Process re-engineering**

Those looking to implement RPA can expect the journey to be process-intensive. Successful implementation of RPA depends on processes being mapped out and defined in a greater level of detail than for most other applications. This detail requires instruction for every exception and variance to ensure that the robot knows how to manage them.

The implementation process can be viewed as an unparalleled opportunity to review and enhance processes. For this reason, shared services and GBS organisations are increasingly using teams made up of external providers and experts from within existing teams to enhance processes, reduce risk and capture clear benefits. Of the organisations which responded only 8 per cent were expecting to move forward with no process changes at all, unless absolutely required by RPA. At the other extreme, few organisations (12 per cent) are undertaking serious surgery on their processes while implementing RPA.

**Figure 7. To what extent do you plan to re-engineer processes as part of your RPA implementation?**



Source: Deloitte analysis

n=59

**Key findings:**

- Processes need to be considered carefully when implementing RPA.
- Reduce the automation risk and capture significant benefits through defined and calculated improvements to the process in advance of any implementation.
- Consider using RPA as an opportunity to standardise and 'lock down' a process.

### Stakeholder support and change management

Like any change programme, stakeholder support is critical. Your key stakeholders are the existing team who know the processes. You will require their support to capture the level of detail you need for the RPA scripts. The survey suggests that RPA has been an easy sell, with team members happy to 'let go' of the most repetitive activities. Some organisations are pitching RPA as a good news story, here to remove the most mundane activities. One organisation has adopted the slogan, "The robots are here to help you".

The IT department is another critical stakeholder when it comes to running a pilot or implementation. RPA has not necessarily become a key strategic priority for IT and the survey reported least engagement from IT as a function. Therefore shared services or GBS leaders looking to implement RPA will need to spend time to ensure that the IT team is comfortable with the technology, particularly the security implications, user ids, and testing requirements. Once RPA is up and running IT is less critical to ongoing delivery and maintenance because, unlike other automation technologies, RPA does not tend to be invasive where core systems are concerned.

From a change management perspective, it is unlikely that RPA will become a like-for-like replacement of a human. Companies need to approach the scoping exercise in the same way as designing the operating model and interaction between an onshore and offshore centre. It is likely that some team roles will need to be re-designed due to the impact of the robot's activities on their day to day job, with many roles becoming more focussed on issue resolution and processing the more complex cases.

In summary, a full implementation of RPA requires thinking around how roles and teams will be structured in the future – as well as investment in change and communications activities to deliver the project smoothly.

"Involvement of IT from the very beginning and selecting the correct implementation partner are both critical for success. Ramping up robots is similar to ramping up a new employee. This is a critical phase which needs to be included in the cutover plan."

### Survey participant

## Lessons learned

Here are some of the key lessons learned from the survey and Deloitte's direct client experience:

- 1. Invest in comprehensive stakeholder management**  
*Stakeholders need to be engaged from the outset to ensure effective buy-in, collaboration and adoption of changes. Senior management and IT stakeholders groups are critical.*
- 2. Select the right process or activity**  
*Ensure that the process is well defined and documented. Check that the part of the process which is chosen can be emulated by a robot by applying key tests, such as: can the rules be defined? is the task based on digital data?*
- 3. Do not automate broken processes**  
*Broken processes should be fixed before automation. Consider whether you will take the opportunity to optimise or enhance processes while you automate.*
- 4. Invest heavily in exceptions management**  
*Process design should clearly identify all exceptions and how the robot will manage them.*
- 5. Conduct robust testing**  
*Conduct business process testing across a large data set.*
- 6. Monitor the quality of the outputs**  
*Where possible, introduce the robots gradually into production, monitoring quality and building user confidence, before ramping up their throughput.*
- 7. Agree up front approach to measuring and tracking benefits**  
*Define benefits clearly and then agree a detailed approach to measuring them.*
- 8. Ensure adequate education and user adoption**  
*Keep the human side in mind – education and a focused approach to user adoption will be critical to success.*
- 9. Ensure vendor and implementation partner business vision alignment**  
*Choose a software vendor and implementation partners that are aligned with your long-term process automation vision.*

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