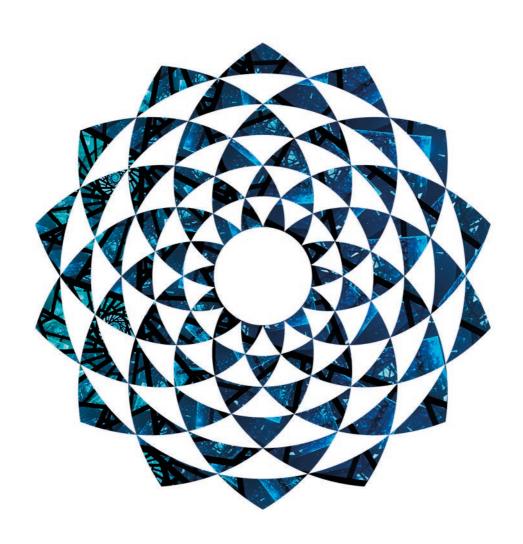
Deloitte.



The robots are waiting

Are you ready to reap the benefits?



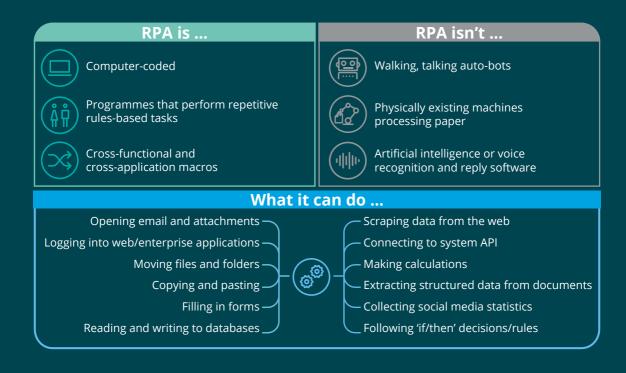
Definitions and methodology

Definitions

For the purpose of this report, *Robotic Process Automation (RPA)*, often referred to as 'robotics' or 'robots', is defined as the automation of rules-based processes with software that utilises the user interface and which can run on any software, including web-based applications, ERP systems and mainframe systems.

Cognitive automation is the use of cognitive or artificial intelligence technologies such as natural-language processing and machine learning to enable more complex automation, typically based on the laws of probabilities.

Digital workforce is used to describe the 'robots' – the automated solutions that are delivering processes within an organisation. In most cases, the digital workforce will be either working in the background on virtual machines or accessed by consumers and co-workers through a command-based interface.



Methodology

In June 2018, Deloitte invited organisations globally to take part in an online survey on their use of RPA. We received responses from 530 individuals from organisations across many industries with combined revenues of \$3.5 trillion. This information has been analysed in aggregate and forms the basis of this publication. In some Figures, because of rounding, percentages may not add up to 100.

Disclaimer

In this publication, references to Deloitte are references to Deloitte LLP, the UK affiliate of Deloitte NWE LLP, a member firm of Deloitte Touche Tohmatsu Limited.

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The value of work done by robots is proven and confidence in robotics has grown significantly over the last year – top priorities for organisations adopting Robotic Process Automation are:



RPA implementation continues to outperform expectations on:

Improved productivity	95%	
Cost to implement	94%	
Improved compliance	93%	



All key stakeholders are reported to be supportive of RPA strategies with significant year-on-year **improvement** in support from the IT function

of organisations implementing or scaling RPA indicated a happier workforce

However, organisations are still struggling to scale robotic process automation, rising by only 1% in the last 12 months

Top three barriers to scaling robotic process automation

Process fragmentation

To overcome this, organisations should be process and value-led; include an end-to-end approach and experiment with cognitive



Only 19% of organisations are focusing on RPA alone. Most are combining RPA with process re-engineering and cognitive technologies

Lack of IT readiness

IT support for RPA is critical to achieving substantial scale; and has almost doubled in the last year 2017 - **31%**; 2018 - **58%**



IT teams need to learn and adapt, and the pace of robot deployment will accelerate rapidly

Lack of ambition

Organisations should engage senior executives and set a bold ambition for the enterprise



One organisation challenged themselves to deliver 10% of the value of their entire administrative operation through a virtual workforce As the ambition for automation grows and RPA is being combined with process excellence and cognitive technologies, organisations need to consider how to manage this scale and increased complexity

Deloitte's **Enterprise Automation Framework** enables organisations to successfully achieve scale, and manage risk, maximising return from their automation investments



Foreword

Welcome to the fourth edition of Deloitte's *Global Robotics Survey*. This report builds on our findings from previous years, as well as Deloitte's research into digital transformation and the future of work.

Combined with insights from our work in Robotic and Cognitive Automation (R&CA) at scale with a wide range of organisations, this report is designed to help senior executives understand market trends and emerging practices in R&CA, assisting them to more effectively achieve widespread adoption.

This year's report highlights the increased evidence of the benefits of automation, near-universal adoption of robotics, strong executive support, continuing recognition of a number of common challenges and further evidence of difficulties in achieving scale.

The benefits of automation are now better understood with demonstrable and measurable results. The value of automation includes benefits from augmenting, as well as replacing, human effort. It has been proven to improve productivity, increase revenue, avoid costs, reduce risk and improve the experience of both customers and employees.

We also examine the striking trend that a few select organisations are able to scale their robotic efforts quickly while others struggle to move beyond early experiments. Many organisations lack a clear vision and ambition for automation. Process fragmentation is a critical barrier that undermines many business cases. Poorly prepared teams, particularly in IT, slow down implementation and increase costs, making many automations economically unviable.

Organisations that have achieved scale in automation are those with a clear vision, strategy and approach to capturing value from automation. They have quantified objectives, identified how to organise to be most effective, approached automation as an enterprise-wide change and have established new and differentiated capabilities required to adopt automation technologies.

Finally, respondents to our survey recognise the additional value that can come from applying robotic and cognitive solutions together. Increasingly, simple yet powerful cognitive solutions including email triage and classification are being integrated with robots, creating more intelligent, adaptive processes. We expect the potential for cognitive capabilities in particular to bridge process fragmentation issues to be more widely exploited in the near future.

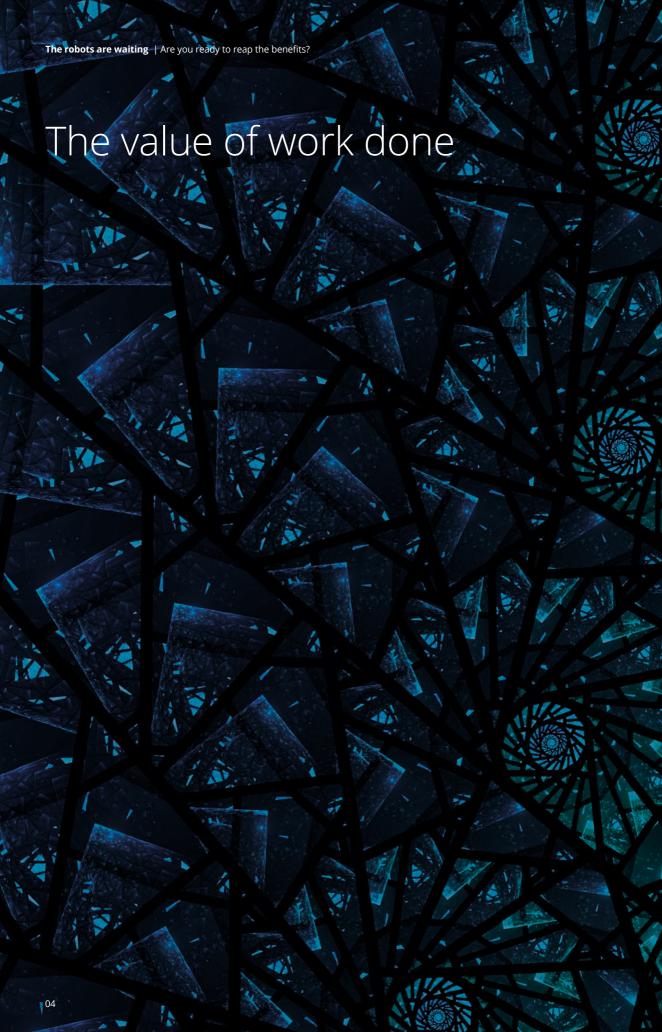
We would like to thank all the executives who participated in our survey and interviews. We hope you find our insights thought provoking and practical, and look forward to your feedback.



Justin WatsonGlobal Robotics and
Cognitive Automation Lead



David WrightRobotic Process Automation Lead
Private Sector, UK Consulting



The findings from Deloitte's 2016 and 2017 research indicated that cost reduction was the main priority when implementing RPA. However, there has been a noticeable shift in the aspiration for robotics. When asked about their automation strategy in our latest research the top three priorities for executives were to increase productivity, improve customer experience and deliver automation at significant scale.

Figure 1. Top three priorities for organisations' automation strategies



Deloitte believes that assessing the value of RPA in terms of productivity rather than labour displacement shows a maturing of many organisations' automation strategies. However, productivity is only one measure of the value of work done by digital workers.

By having a better sense for the broader benefits of an automation, organisations can better prioritise automation investments and better plan how humans should interact with each of their digital colleagues.

The value of work done includes:

- Customer and employee experience
- Labour displacement
- Accuracy
- Productivity
- Loss avoidance

"In Japan, the workforce is naturally shrinking because of the demographic changes we are experiencing. Robotics is not about cost reduction. It's about maintaining the business. Automation is no longer an alternative but necessity."

Senior executive,
Japanese telecommunications company

Improved customer service ranks as the second highest priority in organisations' automation strategies, reflecting both the importance of the customer experience for competitive advantage and the positive impact of automation on experience. In many instances, RPA has reduced processing times and improved accuracy and timeliness, meaning customers are served in an improved and more consistent fashion.

"Analysis showed 50 per cent of the effort spent by our sales team was for administrative tasks. RPA is an enabler for reallocating this effort to improve service to the customer. Reducing the workload is just an intermediate result and not the goal."

Senior executive,
Japanese manufacturing company

Pharmaceutical case study

AstraZeneca used RPA to deliver productivity increases to allow them to take on additional work without adding to their cost base, compromising quality or jeopardising compliance.

Automating follow-up with healthcare professionals and patients

Around the world, AstraZeneca patient safety teams manage around 100,000 Adverse Event (AE) reports every year. An AE is described as "any untoward medical occurrence" in a patient receiving a medicine. These events include everything from so called "non-serious" side effects such as nausea to more serious events such as reports of malignancy. Following up with healthcare professionals to understand reported event(s) as completely as possible is a mandatory legal responsibility of pharmaceutical companies and a critical component of benefit-risk evaluation that helps regulators continually monitor the safety and efficacy of the medicines we take.

In 2016, AstraZeneca's AE follow-up process was largely manual, in common with the pharmaceutical industry as a whole, with patient-safety teams completing paperwork and following up on reports with letters and emails to patients and physicians. As a compliance process under constant scrutiny from the regulatory authorities, any RPA solution for automating AE follow-up would need to undergo full computer systems validation to demonstrate regulatory compliance before deployment – something for which there was no precedent in the industry.

The impact/benefits

AstraZeneca improved its safety compliance and freed up resources to focus on value-adding activities. The solution has improved job satisfaction for AstraZeneca patient safety teams as indicated by increased employee retention. Not only has RPA delivered improved safety compliance it now provides a full audit trail with increased visibility and the ability to perform more insightful analytics. Immediate follow-up with healthcare professionals has also seen improved levels of customer engagement.

Financial services case study

An international wholesale bank recently implemented RPA across parts of its Know Your Customer (KYC) client onboarding process including Customer Due Diligence (CDD) assessment and screening.

Improve the customer experience by automating client on-boarding

The KYC client on-boarding process includes a number of manual, highly repeatable activities that are necessary to achieve compliance but do not require specialist skills to complete, such as searching for company ownership. The use of specialist KYC subject matter experts (SMEs) to perform these activities resulted in less time being spent on other parts of the process where SME knowledge is valuable in improving risk-decisioning.

The bank performed an end-to-end review of the KYC client on-boarding process to determine the most suitable candidate processes for automation based on business value and complexity to automate. Working together with the bank's IT team Deloitte developed a robotic solution using current processes, existing client on-boarding application and existing external permissible sources of data. The functionality automated included:

- identifying an unworked case and triggering the automated process $% \left(1\right) =\left(1\right) \left(1\right)$
- searching three permissible sources for information relevant to CDD
- · searching and discounting entities and individuals to eliminate false positives before screening is performed.

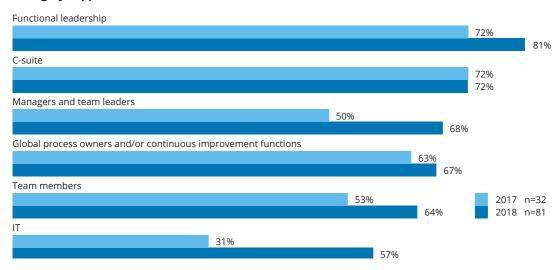
The impact/benefits

Employees are now able to spend more time on riskier parts of the KYC process that require specialist skills. This has increased the team's capacity to review and onboard clients, which has shortened the on-boarding process and improved the customer experience. There has also been an increase in accuracy because of the removal of human error, further shortening the on-boarding process.

More buy-in for the bots

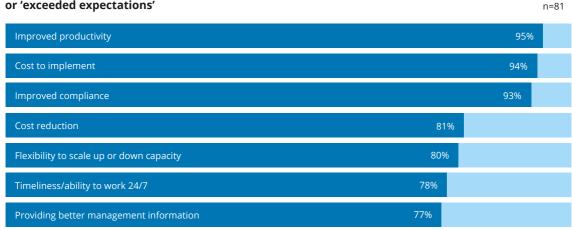
All key automation stakeholders are reported to be supportive of RPA strategies with a significant year-on-year improvement in support from the IT function. In 2017, IT was only deemed to be 'supportive' or 'highly supportive' by 31 per cent of survey respondents. This year over half of the respondents indicated that IT is 'supportive' or 'highly supportive' of their strategy. Support from C-suite executives remains high while support from functional leaders such as CHROs, CFOs and CPOs also saw an increase.

Figure 2. Support for RPA implementation, percentage of respondents 'supportive' or 'highly supportive'



In our view, the increase in support is in part due to the widely recognised benefits achieved by many robotics programmes. More than 90 per cent of organisations surveyed (who have implemented or are scaling robotics) believe that RPA has met or exceeded their expectations on improved productivity, improved compliance and cost to implement. Given its track record of delivering results, robotics is now getting support from across the enterprise.

Figure 3. RPA benefits delivered against expectations, percentage 'met expectations' or 'exceeded expectations'



Through our work with clients we have seen how attitudes towards RPA from the IT function have changed. Initially RPA was seen as being owned by the business and IT teams were cautious towards robotics believing that it could introduce risk into enterprise systems. However, over time IT functions have grown in confidence, as they have invested time developing a better understanding of the technology.

Increased levels of stakeholder support is also the result of organisations using a range of formal and informal engagement and education initiatives before, during and after implementation. These can include:



Introduction to RPA sessions aka 'build a bot' sessions



Daily huddles to share development progress and question process owners



Weekly status meetings where risks and issues are raised and monitored against plan



Monthly steering committees for governance, decisions and to track progress, performance of robots and benefits realisation



Wider regular communications via telephone, email (newsletters), faceto-face and intranet updates to show progress and impact

Figure 4. Example of RPA communication to stakeholder

Staff-member, A (UK - London)

RPAdeploymentteam@companyXYZ.com From:

10 October 2018 15:16 Sent:

GlobalH2RProcessOwnersAll; GlobalR2RProcessOwnersAll; GlobalP2PProcessOwnersAll; To:

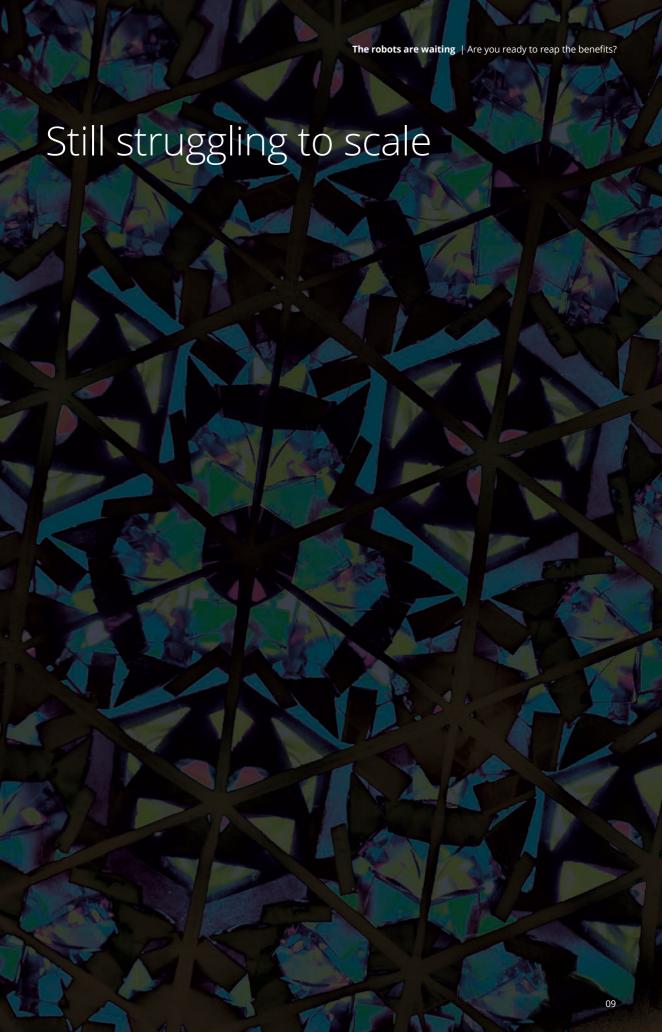
GlobalO2CProcessOwnersAll; GBSLeadershipAll; ITLeadershipAll;

Cc: Competition - Name our new robot Subject:

Dear Global Process Owners,

Thank you for your help in identifying our first RPA automation opportunity.

Now we need your help in naming the robot (who will be your digital co-worker)! Please send suggestions to the RPA Deployment Team mailbox by 19th October for your chance to name our first robot.



While evidence suggests the conditions for automating at scale are in place, it is equally clear that organisations are struggling to scale in the way we might have anticipated only a year ago. Only four per cent of respondents to our survey are operating more than 50 robots. Twenty-seven per cent are either piloting RPA with under 10 robots or have moved into full implementation with between 10 and 50 robots.

This shows little year-on-year growth from our 2017 findings where only three per cent of respondents had achieved substantial scale.

In the same way that executives are clear on the benefits of automation, and have secured senior stakeholder support to invest, it is also apparent they understand what prevents them from reaching substantial scale.

Figure 5. Maturity of RPA implementation, percentage of respondents

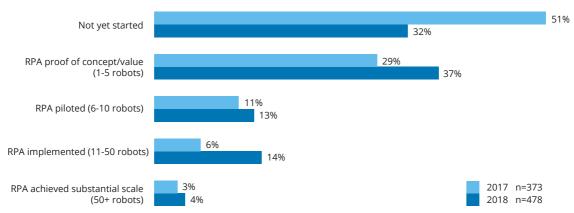
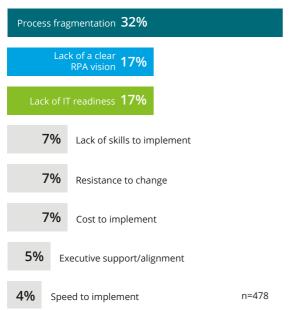


Figure 6. Biggest barriers to scaling RPA, percentage of respondents



Respondents to our survey cite process fragmentation, lack of IT readiness and lack of a clear vision as their main barriers to achieving scale.

Process fragmentation

The most obvious and challenging barrier is cited as process fragmentation, typically caused by multiple process and system variations and resulting in increased complexity and reduced leverage from individual automations. Most obviously, this is identified during discovery activities and results in automation opportunity pipelines including a very high number of very low value opportunities. A mean opportunity value of \$50,000 per task automation is quite common, setting a low bar for implementation costs.

Lack of a clear RPA vision

We are frequently surprised at how many organisations have yet to define a vision and ambition for automation. Without this, it is not clear how automation teams will secure the funding to build the skills, capability and capacity required to automate at scale. At its simplest, being able to articulate how many bots will be implemented over the next year, and where and why these will be deployed, is surely essential to securing investment from senior management.

Lack of IT readiness

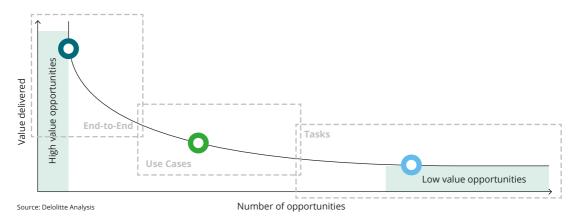
In our experience many IT teams are only just beginning to fully appreciate how different the deployment of automation technologies is to traditional IT systems, how profound the changes they will introduce are, and the potential impact on the role of IT teams. We have seen medium complexity robot implementation schedules ranging from 4 weeks up to 24 weeks. Needless to say, at the upper end of that range automation becomes non-viable economically. As IT teams learn and adapt to the changes required to implement automation technologies successfully, the pace of robot deployment accelerates rapidly.

Adapting to process fragmentation

Process fragmentation is manifested daily in how processes are performed across an organisation. While we may believe we have a standard payments or claims process, there is in reality wide variation at the desktop level – different hand-offs, offline tools, email and paper. Processes are not typically recorded or documented at this level, and attempting to do so during automation projects always uncovers a wide range of 'unknown unknowns'.

Figure 7. Typical profile of enterprise-wide automation opportunities

The most obvious consequence of process fragmentation is the typical profile of the pipeline of automation opportunities resulting from discovery exercises. In many cases, automation teams have begun by identifying as many tasks that might be automated as possible. As a result, they have identified a huge number of opportunities that are not economically viable given their current cost to implement and operate. With a mean benefit value in the region of \$50,000, we are not surprised that the automation market in many areas has become quickly commoditised.



To overcome fragmentation, and to sustain and enhance the business case for automation, organisations can take a number of steps:

1. Be process and value-led

Treating automation as a technology implementation and failing to focus on high value business opportunities will deliver lower returns. Close-knit operations, process and IT teams focused on quick, high value business opportunities deliver superior returns.

2. Take a portfolio approach

As tempting (and easy) as it might be to focus on simple task automations only, doing so is unlikely to release significant benefits. Take a portfolio approach, mixing task automations with wider 'use cases' and, where possible, looking at end-to-end processes to systematically identify all the automations (and process enhancements) required.

3. Follow the happy path

Focus on getting the simple parts of a process automated first – exceptions can follow later. Start small with a 'first mover', roll-in other areas later and adapt processes only where necessary.

4. Experiment with cognitive

Cognitive solutions for relatively simple activities like email triage or classification are highly effective, maturing rapidly and do not take long to train. Combining RPA and cognitive automation technologies can dramatically increase return on investment.

Manufacturing case study

A global manufacturer recently automated thirty end-to-end processes. This high value end-to-end automation followed a vision going beyond Full Time Equivalent (FTE) reduction to enable an adaptive process with machine learning working in tandem with robots to improve collections and reduce working capital.

Adaptive processes enabled by Robotic and Cognitive Automation

Finance operational processes in the Americas, EMEA and Asia Pacific were analysed to identify highest value automation benefits. Processes were simplified, standardised and restructured, as needed, to improve the potential for automation. Thirty processes (at a granular step-by-step level) were automated in three development waves yielding significant cost improvement.

"In pursuing our transformation vision, not only did we achieve significant cost savings, but through automation, we have been able to generate a wealth of data to gain substantial insights into our own organisation. These insights have enabled us to pinpoint inefficiency, drive improvements, and develop and inform strategy for our future."

Director, Shared Services

Combining robotics, analytics and Al allowed the global manufacturer to achieve actionable insights and drive significant value back to the organisation. More than 50 robots are embedded in the end-to-end collections process, undertaking 30 per cent of the human workforce and allowing for reallocation of human labour to more complex and interesting tasks. The robots are connected to a machine learning algorithm monitoring, analysing and predicting payment performance. In the event the algorithm detects a customer unlikely to pay on time, the algorithm adjusts how the robots run the customer.

Robotic Process Automation	Analytics	Artificial Intelligence
Through RPA, they achieved 80 per cent improved efficiency across several operational processes, as well as more than a 30 per cent reduction in operating costs.	Through analytics, they were able to detect key patterns and relationships within automation data to derive deep and actionable insight. This allowed them to streamline supplier practices and improve their customer engagements.	Artificial Intelligence is being developed to create predictive models for a customer's propensity to pay on time.

The impact/benefits

The global manufacturer was able to extract value quickly from improved visibility, predictive insight, and rapid automated response. Data created by the robots has been used to develop detailed insight on customer and supplier behaviour, creating new opportunities to improve business outcomes. Immediate performance improvements have been captured in reduced working capital, reduced days sales outstanding, and improved compliance with customer payment terms. Further, behavioural insight into customers and suppliers is now incorporated into current and future contract negotiations.

Healthcare case study

Most National Health Service (NHS) services in the UK are experiencing a significant gap between demand and capacity. To ensure the most efficient use of resources – seeing the right patient at the right time – a large UK teaching hospital recently automated the referral process for patients.

Referral and intelligent triage analytics Referral and intelligent triage The typical route to access secondary care analytics (RITA) actively manages demand. Robots process **R&CA** in action GP completes online referral form electronically held patient Electronically held clinical information to secondary care containing information. Al is used to triage patient referrals (and determine the • Structured data e.g. patient urgency of the referral) based on demographics, current analysis of structured and medications unstructured data contained in the Unstructured data e.g. "Dear online referral form completed by a doctor, please will you review general practitioner (GP). this 77 year old... RITA has analysed over 21,500 incoming referral letters identifying patterns between referral letter Received by referral management language and triage pathway. It has a service (RMS) or direct to 96 per cent accuracy of triaging 'Engine secondary patients with suspicion of cancer and an 86 per cent accuracy in predicting Referral vetted for completeness the most likely clinic or diagnostic pathway. The impact/benefits RITA will triage ('outcome') each patient referral, determining Real-time capacity & demand planning which pathway or waiting list the RITA can use incoming referral letter patient should join and with what data and historical data to map out: urgency • Future demand on the service e.g. how many extra clinic or endoscopy slots the service will require to meet targets OP Gastroenterology clinic -Input the AI engine Suspected cancer result into the system · Individual demand per patient Inflammatory Bowel Disease clinic on the service from referral until discharge Once assigned to a specific pathway, an additional Faster patient triage Direct to endoscopy + bowel prep administrative team will book Automating the triage process is - Urgent patients appointments and send estimated to reduce the overall necessary paperwork Referral To Treatment (RTT) pathway No appointment – Advice to GP by 2-3 days - approx. 15% of a two week wait target Quality assurance and education Saving clinical time Clinical pathway redesign & variation RITA can assess incoming referrals Consultant clinicians are released for low quality, incomplete or from triaging duties equivalent to assessment RITA can use a 'definitive truth' for the insufficient referral information, multiple hours of administrative National Institute for Health and Care helping ensure the correct clinical burden per day Excellence (NICE) guidelines; and decisions can be made and focusing assess triage for variation from these the secondary to primary care protocols educational agenda

Setting your vision and ambition

Rarely do we find that the organisations we work with have a longer-term vision when experimenting with automation technologies. Many believe that a vision is not needed because the experiment may fail. Even when seeking to scale many organisations do not consider the importance of a vision. Securing the investment needed to enhance the capabilities required for scale without a vision is almost impossible. Almost without exception, automation teams that have achieved scale have defined and communicated a vision and ambition to secure the investment they need.



Lay out your vision

A vision typically describes the aspirations for the organisation, which may include automating today's business

or indeed creating new businesses and new business models. Presented as a narrative, the vision should describe what will be different and why, and the benefits of this change.

While in previous years we found the vision for automation would predominantly be voiced in terms of cost reduction or labour displacement, today we find they are much more nuanced. More frequently, we find that the vision is about returning time to employees, improving the customer experience, eliminating errors and reducing losses.



Quantify your vision

The ambition quantifies the vision, allowing the organisation to detail more specific goals. In our experience it is very

important to have a target number of automations and a schedule. This in turn determines the size of the team required for scale implementation and how they will work together. Ambitions for our clients typically range from implementing 50 automations in a year up to 1,000 automations over a three-to-four year period.



Size your automation team

Consider an organisation wishing to implement 100 automations a year.
With an average implementation time per

medium complexity automation (assuming one robot per automation) of 10 weeks, including hyper care, to implement two automations requires two developers and one process analyst alongside the time required from the operator. On this basis, the company will require approximately 10 process analysts and 20 developers.

It could be argued that to reduce this headcount requirement, the automation backlog could simply be implemented at a slower pace. In our experience, it is important that automations are implemented at speed, or opportunities become stale and any 'discovery' efforts have to be repeated.



Create a Centre of Enablement

Given the headcount requirement noted above, it becomes obvious that some additional overhead will be required to

lead and manage these teams, often in a Centre of Excellence, or Centre of Enablement (CoE) as we prefer. In addition, the CoE will need to perform a prioritisation, selection and arbitration role as demand comes in from various parts of the organisation.



Go end-to-end for higher return on investment

Since these costs will mount, it therefore becomes increasingly important to

demonstrate a return on this investment. Despite this, we find many organisations focused primarily on task automation, in which they undertake extensive 'discovery' for small automation opportunities that do not significantly disrupt processing activities.

While this is an essential part of any automation portfolio, and is important for developing the skills and experience to scale, as we note elsewhere in our research this can result in a low return on investment. This is especially the case for discovery activities that begin in the back office, in offshore or near shore delivery centres.

With a bolder vision and better understanding of how to achieve a return from automation, moving up the value chain to higher value 'use cases' and end-to-end process automation, we believe that organisations can find a different way of automating at scale which delivers far superior returns in the short term.

Making it happen

Why is it that in some organisations automations can be designed, implemented and promoted to production in three weeks, and in others it takes over twenty weeks? In many cases it is because those IT organisations recognise automation technologies are new paradigm, very different to systems they might have worked with before, have been able to learn quickly and so have played a critical role in deploying automation at scale and at pace.

With this new mindset IT teams actively support business teams who are deploying digital workers, not just implementing software. They enable distributed change, and don't try to do it all themselves. They do so quickly using agile or hybrid agile techniques, collaborating closely in small pods with their colleagues across the business, and doing so in creative ways. They challenge existing standards and recognise automation technologies are a new paradigm, cutting through ways of working that are no longer needed or relevant for automation. They speed things up.

Before IT teams achieve this mindset shift, they can have a debilitating impact on the pace and effectiveness of automation programmes. The infrastructure, applications, data security, compliance and other enablers critical to achieving pace and quality in automation are difficult to establish and when they do happen they do so slowly. Implementation lifecycles are unnecessarily long, making many automations economically non-viable. Tensions arise, and because automation technologies are relatively simple and intuitive, business teams start automating themselves. Proliferation occurs, and future costs are incurred to simplify things later.

Definitions: Project management methodologies

Waterfall: A traditional approach to development and delivery, focusing on controlling a project's scope, cost and schedule – all three of which are predetermined before a project starts

Agile: A time-boxed iterative approach to delivery that builds incrementally

Design thinking: A practical approach to user-centred innovation.

Figure 8. Example of lean hybrid agile RPA design and implementation method, pharmaceutical industry



Speed of execution really matters in automation and many organisations are adapting a lean hybrid agile implementation approach, typically involving six steps.

An opportunity for a process to be automated is *identified* by the business. Initial analysis is performed and the opportunity is recorded in a pipeline. A pipeline review identifies promising opportunities to progress to more formal qualification.

The opportunity will be *qualified*, which involves due diligence on risk, business criticality, data privacy and process complexity. A recommendation to progress (or not) is made and which development pathway the opportunity should follow.

Accelerated path: Suitable for low risk, low complexity processes in a mature organisation

Standard path: Suitable for medium risk or medium complexity processes

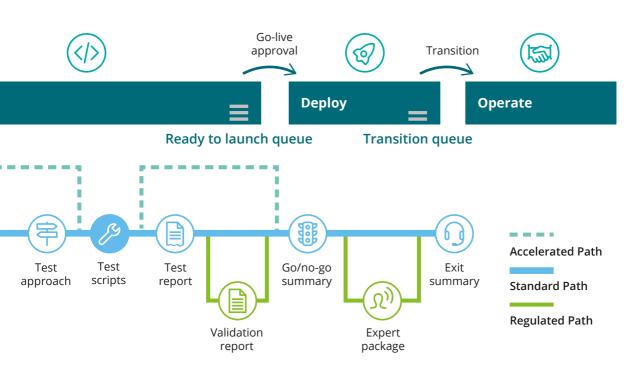
Regulated path: Suitable for high risk processes, ensuring that regulatory compliance and business critical processes are well documented and rigorously tested.

Recommendations are categorised, prioritised and presented to an opportunity selection group for selection.

Once an opportunity is approved for implementation, then the project manager and IT leader *plan* for the development of the solution ensuring that everything is in place to develop and deploy the solution (for example, infrastructure, testing data, system access, project plans, etc.).

With everything set up, the delivery team can utilise an agile approach to *develop* the solution through iterative design, build and testing activities. This will also involve the creation and approval of the required documents for the relevant development route. Once the robotic solution is developed and tested, a Go-live decision can be configured.

If approval is granted, the solution can be *deployed* into production. Following deployment, there will be a period of 'hypercare' where support and training will be provided to transition the solution into the business team which then has responsibility for its day-to-day *operation*.



How to start scaling

Robotics is past the point of proof of concept. RPA is being used globally by organisations in every industry. Despite this, as we have discussed, few organisations have achieved substantial scale (more than 50 robots implemented). This is mainly the result of process fragmentation or lack of IT readiness. For some organisations this is because they are not yet able to articulate a compelling and deliverable vision of their enterprise transformed by automation.

Leaders should recognise automation technologies as a new paradigm, and recognise that new capabilities and ways of working will be required to achieve scale. Deloitte's *Enterprise Automation Framework* identifies the capabilities required to scale, combining policies, standards, governance, ways of working and roles and responsibilities.

Figure 9. Deloitte's Enterprise Automation Framework

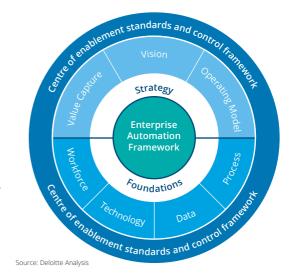


Table 1. Areas of automation value

Centre of enablement standards and control framework

Policies, standards, governance, ways of working and roles and responsibilities to support fast yet controlled adoption across the enterprise

Vision	Operating model	Tranformation
A bold yet plausible vision and ambition	New ways of organising and working to adopt and collaborate with a digital workforce	Taking a transformational approach to change enabled by automation technologies

Workforce	Technology	Data	Process
Having the skills	'Daisy-chaining'	Proactive	Enabling adaptive
and capacity to	technologies in a	governance and	value streams,
automate at scale	stable, resilient	quality	driving
and support	and secure	management of	differentiated
employees whose	environment, in a	structured and	business
roles will change	fast and agile way	unstructured data	performance

To unblock automation programmes and achieve scale, executives should encourage investment in new capabilities, and support a culture of learning, innovation, iteration and agile ways of working.

Our experience is that senior executives need to take dedicated time out to properly set a vision and ambition for R&CA, and to agree how to make this a reality. We have developed the Deloitte R&CA Scaling Lab, an interactive exploration for senior executives of the specific capabilities required for an organisation to successfully achieve scale in their automation activites. In a day-long event, executives explore each area of the *Enterprise Automation Framework*, identifying the specific changes required for success in their own organisation and agreeing how they will work together to achieve them.

In the R&CA Scaling Lab, leadership teams determine their vision and roadmap for implementing automation solutions at scale, thereby creating the potential to transform their business.

Figure 10. Deloitte's R&CA Scaling Lab



- Discover cognitive technologies and the 'art of the possible
- Agree a vision and ambition for scaling automation technologies
- Understand the key capabilities required to scale automation in an enterprise
- Understand current position and define key scaling actions



Who?

- Organisations who have piloted robotics and now wish to scale
 - Function or Business Unit leaders who want to understand and improve the foundational capabilities for automation scaling.
- Key automation stakeholders who need to agree a commor vision

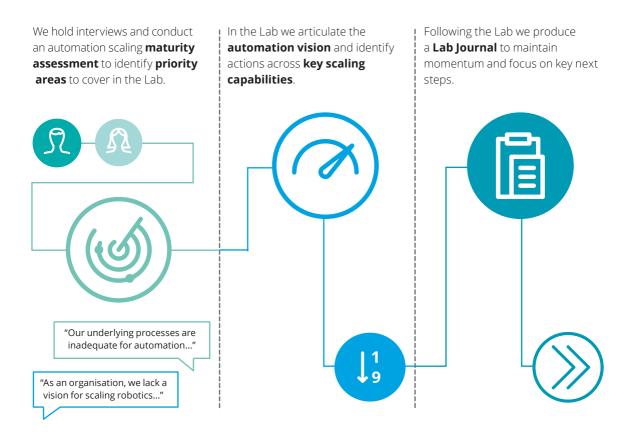


Style?

- A full day immersive session
- Interactive activities and exercises to guide participants in defining actions for automation scaling
- Thought leadership and industry-leading examples

Figure 11. R&CA Scaling Lab approach





As the demand for automation grows, the importance of combining emerging technologies will lead to fundamental changes in how all organisations operate and deliver services.

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