Robotic and Cognitive Automation
The fusion of digital with operational excellence
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Digital Operational Excellence
Summary

In recent years Robotic Process Automation (RPA) has emerged as a viable, cost effective lever to drive value from multiple sources by reducing cost, improving operational risk management, creating capacity to enable growth and improving customer experience. The promise of minimal investment, faster ROI and relatively light engineering has led many firms across all industry sectors to explore and pilot RPA capability. However, for many firms, getting to scale and developing sustainable capability proves more elusive as they navigate the realities of fractured business processes, unstructured data, legacy IT architectures and traditional change governance cultures.

In our client engagements at market leading RPA Centres of Excellence (CoE) we see certain themes and trends emerging as critical success criteria for achieving sustainable capability and business benefits. In this paper, we share our insights into RPA leadership, strategic drivers, service delivery models and organisational design, talent and technology.

Our strategic insight is that the firms who extract most value from RPA see it as a complimentary lever within a wider ‘Digital Operational Excellence’ framework. Their rounded and realistic view acknowledges the benefit of adopting a ‘right lever, right place, right time’ approach across entire value streams. In effect, this assimilates Digitisation, Lean, RPA, Organisational Design, Operations Management, System Integration and Sourcing solutions and provides the right foundation to exploit emerging cognitive technologies such as Image Recognition, Natural Language Processing and Machine Learning, thus evolving RPA to Robotic & Cognitive Automation.

“the world will adopt robotic and cognitive technology in two ways, gradually and then suddenly”

John Kilbride
Market Insight

The RPA tide has turned

53% of firms surveyed have commenced their RPA journey.

Scale proves elusive

...but only 3% have scaled their digital workforce.

Learn how to scale from the CoE pioneers

The second wave can play fast follower and learn how to accelerate and de-risk the design and scaling of RPA centres of excellence.

Exponential RPA

The digital workforce may still be at nursery stage, however adoption will occur in two ways, gradually and then suddenly.
Introduction

Over the last 12 months we have seen a dramatic increase in the adoption of Robotic Process Automation (RPA) in firms across all private and public sectors of the global economy. A 2017 Deloitte survey shows that 53% of companies who participated have already begun their robotics journey. 73% of these companies plan to increase their investment in robotics over the next three years. Only 3% of respondents, however, have as yet managed to scale their digital workforce. The majority of these firms are either in the discovery phase (socialising the concepts, options and risks with various stakeholders) or are still exploring the RPA business case through short, focussed Proof of Value (PoV) engagements. More advanced early adopters are grappling with a different set of challenges, namely scaling their RPA capability and industrialising the operation.

While it may still be too early to name the winning formula for a sustainable RPA capability, our engagements with market leading RPA Centres of Excellence (CoE) have identified that certain themes and trends are emerging as critical for success. These include RPA leadership, strategic drivers and business benefits, service delivery models and organisational design, talent and, of course, technology.

By learning from their predecessors’ hard-earned experiences, we believe that firms looking to develop an RPA capability can de-risk the launch and scaling phases, and accelerate the realisation of sustainable business benefits.

“RPA Operating Model 2.0 will see some shift towards IT ownership as the realities of running an RPA operation at scale emerge”

Ajay Yadav
Leadership & Benefits

Executive sponsorship is critical. Expect some shift in ownership towards IT as the realities of scale emerge.

ROI is currently driven by capacity creation and cost reduction/avoidance. Long term we see firms capture value from RPA across multiple (customer, growth, risk/control) benefits levers.

RPA is business led... for now
Insights into the RCA CoE

1. Leadership and Accountability for Benefits Realisation

1.1 Who is Driving RPA?
Our view of the market suggests RPA is being led by the business (and not technology) with a dedicated Head of Function in charge of an RPA CoE and reporting to a COO or other CXO. Although RPA is not driven by technology, a close relationship between technology and the business is critical for successful operation and realisation of benefits.

One interesting question is: in the RPA Operating Model 2.0, will we see a shift towards IT ownership as the realities of running an RPA operation at scale emerge? Clients who are considering setting up a CoE frequently ask us what role to assign to the CoE versus the business unit(s). Where does the buck stop? Typically, the business unit retains accountability and responsibility for benefits realisation while the RPA CoE operates as a delivery ‘factory’ and/or performs an independent portfolio management role to track realised benefits. In some more innovative business models we see the internal customer and RPA CoE jointly responsible and accountable for benefits. The real advantage of this is that it forces the CoE to have skin in the game so when it comes to process selection they only sign up to automation projects where they believe in the benefits.

1.2 Business Case Drivers and Accelerating the ROI
To date, cost reduction and cost avoidance/capacity creation are the principal drivers of the quantitative business case for RPA. However, as RPA capability matures, we predict that more value will come from adjacent sources such as improved accuracy and reduced risk, better customer experience (faster responsiveness to queries, service requests and fraud) and reduced employee attrition or increased productivity from better morale. The attractiveness of RPA over more traditional IT integration stems from its non-invasive approach which reduces the investment and time/effort required to develop the solution and improves ROI. Nevertheless, our advice is to manage expectations of efficiency gains. A realistic target once the operation is at scale might be an efficiency ratio of 4:1 human vs RPA although this may take time to achieve and is implicitly linked to the scalability of the underlying processes.

Banking the actual ‘realised’ benefits is a challenge in itself. Typically, the business unit will re-deploy capacity created through RPA (to accommodate growth). This reinforces the need for stringent governance of the business case and benefits realisation. Implicit in this is the need to understand and measure ‘As Is’ effort, creating a baseline against which RPA benefits can be measured. We recommend doing this parallel to the automation project so as to reduce the impact to the business. Failure to establish a baseline will result in invisible or intangible benefits which, especially in the first year, can dilute RPA’s attractiveness and discourage executive management from committing further investment to scale the capability.

1.3 Process Evaluation and Selection
What is clear in the hunt for business benefits is that it is imperative to select the right processes (namely those with the highest RPA potential). The best way to achieve this is to ensure that both
the business units and the CoE have a say and share responsibility for the evaluation, selection and prioritisation of the automation pipeline. Typically, we see a functional approach favoured with multiple adjacent processes filtered through a set of structured evaluation criteria. These are augmented by 'floor walks' and desk side assessments, to align the suitability of RPA versus the business benefits. An integration assessment should also be included in the evaluation and selection process to test technology/tool compatibility with existing business applications. This may include an assessment of licensing implications. Emerging best practice is to assign processes to ‘waves’ where low hanging fruit is prioritised for immediate RPA and while other processes such as Digitisation or Lean are assigned remedial action to prepare them for RPA at a later date. On this latter point, we try not to talk to clients about an RPA only approach as the risk of starting with a hammer is that you end up looking for anything that might resemble a nail. Instead, we advise clients to approach RPA as one more lever in the Digital Operational Excellence toolkit rather than as a stand-alone panacea. Implicit in this approach is the need to eliminate wasteful processes and apply operational excellence levers (Digitisation, Organisation Design, Outsourcing, Offshoring) on a value-stream basis. This holistic approach is both realistic and more likely to achieve the end-to-end business transformation required to achieve sustainable business benefits.

1.4 Governance

Key governance principles to incorporate in any RPA CoE include clarity about accountability and responsibility across the robotic lifecycle, from process selection and change delivery through to daily operations, with clear escalation routes for the management of exceptions, incidents and change requests. Alignment with existing organisational structures and governance forums including risk boards, architectural and design authorities and IT change portfolio management is critical to gaining buy in and support from Technology. Governance committees need to adopt a fail-fast ethos and pragmatic stage-gating as these are key success factors in a lean hybrid agile delivery methodology.

Growing the Digital Workforce

A large Australian Bank explains its RPA strategy in the following terms: RPA is an expression of the creation of a digital or virtual workforce; with robots and virtual agents sitting alongside their human counterparts on the organisation chart. Over time, when a business unit makes a business case to add ‘resources’, a decision will be made to either allocate capacity from the robotic workforce or if human resources are more appropriate, to instigate the recruitment process. Like human employees, ‘bots’ need to be hired, trained, managed and developed on an on-going basis. As such, it’s important for the business operations to take ownership from the start. The business bring the bots in and must be responsible for their performance and development over time.

“need for partnership with technology to achieve scale”

Oleg Tyschenko
Service Offering

RPA is not a silver bullet. It should be viewed as part of a suite of complimentary operational excellence levers (including digitalisation, lean, organisational design, sourcing) - to eliminate, simplify, standardise and automate.

Evolution from digital to AI Operations

Maturing from RPA to Intelligent or Cognitive Automation will require advanced analytics (data science), IT engineering and digital Op. Ex. capabilities.
2. Customers and Services

2.1 Which Internal Customers Does the RPA CoE Target and What Services Do They Offer?

Our view of the market is that firms initially establish RPA CoEs with a mandate to automate processes so as to release capacity or avoid costs. The first wave of (internal) customers therefore are in the back office/shared service/BPO space. Where middle office and customer-facing functions are exploring RPA potential, this is usually based on different business drivers (e.g. reducing risk and improving customer experience). In all instances, the real point is that RPA is function agnostic with success or failure determined by cross functional criteria such as the level of process standardisation and complexity.

2.2 Service Offering - Moving towards Digital Operational Excellence

As stated above, RPA should be viewed as one lever in a suite of operational excellence levers to be used alongside Digitisation, Lean, System Transformation, Workforce Management, Outsourcing and Offshoring. To date we see RPA CoEs operating proximal to established Lean or Process Excellence (PEX) CoEs with little or no formal integration. Over time, we anticipate that closer alignment of these capabilities (and the underlying change pipelines) will minimise BAU disruption to extract maximum value and synergies through the right blend of approaches. This will become more urgent once the initial RPA wave has collected the low hanging benefits from easier-to-automate processes. Thought needs to be given to how to align the RPA approach (short, agile sprints unlocking benefits in an iterative and incremental manner) with the traditional Lean approach which often involves much longer timescales and more comprehensive end-to-end process reviews.

2.3 Alignment with Cognitive and Advanced Analytics

Traditionally, cognitive capabilities were the realm of data analytics, digital and innovation labs. However in 2018 and over the next 2 years, we expect to see greater maturity in RPA service offerings towards more ‘intelligent automation’ as RPA and Cognitive technologies align. This alignment will provide better insights (e.g. through the use of machine learning to identify and extract insights on the digitised automated process data) and improved customer engagement (e.g. through virtual agents, conversational commerce and chatbots). It remains to be seen whether firms will choose to stand up adjacent CoEs or whether existing RPA CoEs will adopt cognitive technologies (OCR, NLP/NLG, and Machine Learning) to evolve into Robotic and Cognitive (RCA) CoEs.

“..need clarity with the business over accountability and responsibility across the robotic lifecycle..”

Christine Madeleine Hicquet
Delivery Model

**Fast ROI means hybrid-agile delivery**
Involves a creative, iterative and incremental approach and a cultural environment that encourages teams to experiment, fail fast and pivot to achieve the fast ROI.

**Physical proximity is king**
Onshore delivery models are critical to accelerate and assure quality delivery especially in the early growth stages.

Operating and Sourcing Models

**Which Organisational Design is right?**
Functional, federated and centralised operating models can all work. Choose what's right for your business model. Think big but start small.

**63%**
High dependency on external support

... of firms plan to engage an implementation partner to accelerate and de-risk the establishment of RPA CoEs but also to provide delivery capacity and subject matter knowledge to implementations in local business units.*
3. Operating and Service Delivery Models

3.1 Organisational Models
As with other business transformation capabilities, location and sourcing strategies are an important consideration when setting up an RPA CoE. In some instances, we see pockets of RPA emerge in siloed functional units before consolidation into a CoE designed to ensure uniformity of standards and methods and to exploit platform synergies. What happens next may represent a pivotal moment in the RPA strategy. Functional, federated and enterprise service delivery models each come with relative merits. If the long term ambition is to locate RPA capability close to ‘end users’ in the business, this will tend to drive the strategy towards federated models which give business units freedom to drive their ‘local’ agenda within an overarching enterprise RPA platform and governance framework.

3.2 The Argument for Heavy vs Light CoE
Each organisation needs to obtain the right balance between the business unit’s role (typically providing project sponsorship and management and business knowledge) and that of the RPA CoE. The latter providers a shared, secure and scalable enterprise platform, manages vendors, owns delivery frameworks and standards, and provides technical RPA skills to develop and control the robots in production. The challenge is to ensure that the CoE does not become a bottleneck while retaining sufficient involvement to ensure common quality standards are adhered to. This is more pronounced in fully centralised models. The challenge can be overcome with more federated or ‘hub and spoke’ style delivery models.

3.3 Proximity is King
The key to delivering RPA and unlocking benefits quickly is physical proximity. In practical terms, to facilitate iterative and incremental delivery, this requires that a business analyst (process re-design), RPA developer (robot configuration) and business subject matter expert are in close physical proximity. As the capability matures, we expect to see more success with blended or remote/offshore delivery models. However, for firms building the business case or trying to achieve scale, we see proximity as the way to harvest benefits quickly and de-risk delivery.

3.4 Sourcing Strategy
At this stage of the maturity cycle we see a heavy reliance on external consulting support to accelerate and de-risk the establishment of RPA CoEs and provide delivery capacity and subject matter knowledge for implementations in local business units.

Commercial Models – Getting the RPA CoE to Pay for Itself?
The simplest pricing model is a cost centre. This is typically used for functional or fixed duration programmes. An enterprise CoE, set up to service multiple business units, may evolve towards a charge-back model where RPA licence costs are pro-rated based on usage and CoE resources are charged to business units on a time and materials basis. Risk sharing is a more innovative pricing model. It ties the remuneration of the CoE to a portion of the savings realised however the CoE must be satisfied that benefits can be realised in order to take on risk. Consequently, the CoE must be involved in the process selection stage.

“cultural environment that encourages teams to experiment, fail fast and pivot.”

David Adams
Talent

Experienced talent is in short supply in most markets

Driving salaries to unsustainable (and frankly unjustified levels). Equilibrium will happen within 2 years.

It’s prudent to allocate at least 25%+ of the resource pool.

DevOps- The overhead to run RPA operations is underestimated

Get IT on side. Strong technical expertise is essential to scale

As the RPA operation scales, the focus moves from point automation of individual processes, to scalability, performance, licence utilisation and enterprise architecture.

RPA at scale requires multiple technical roles beyond developer

The roles of solution architect and database administrator are critical for both designing and maintaining the back-end as well as managing the information produced by the robots.
4. Talent and Ways of Working

4.1 Talent Needs to Be Sourced from the Business and IT
RPA tends to be driven by business operations rather than IT. In keeping with this, RPA CoEs tend to source core talent from business operations. Individuals with subject matter knowledge and people with Lean and Process Excellence experience are an obvious fit. However, the accessibility of RPA development is oversold by some vendors. While deep knowledge of IT development is not a prerequisite per se for point automations, strong technical experience is essential. As the RPA operation develops, the challenge moves from point automation of individual processes, to scalability, performance, licence utilisation and of enterprise architecture. This involves the integration of RPA with up and down stream traditional and digital operations including data capture, digitisation, OCR/IR/NLP and other cognitive tools and workflow. Therefore, knowledge and understanding of software development is important. Skills such as JavaScript and server-side programming allow the development of faster and more stable automated.

A leading world class CoE in the financial services industry has a team with employees experienced in “full stack” development, database administration, front-end development, data analytics, and infrastructure deployment including traditional server architectures and virtual environments. These skills provide the CoE with a comprehensive and best-in-breed capability that outputs clear and tangible financial results. This enhances the performance of the entire business delivering visible benefits that are clear to senior business stakeholders and all relevant parties.

In distributed operating models where the business retains operational control of processes on a day-to-day basis, technical skills need to be developed or sourced into the business.11

4.2 Organisation and Structure
Typically, people within the RPA CoE are organised into teams with responsibility for pipeline/demand, delivery, control and governance. Small sub-teams are assigned to particular business functions. These teams develop relationships with stakeholders and knowledge of the underlying systems and processes, resulting in better quality services and faster delivery over time. One mistake we see is an under-appreciation of the overhead in managing automated processes once in production.12 Experience suggests that it is prudent to allocate at least 25% of the resource pool to production control activities.

4.3 Talent Pools
Over the past 12 months, experienced RPA developers are in short supply in the market resulting in unsustainable salary levels for resources with relatively modest experience and expertise. We expect the supply to equilibrate during 2018.13

4.4 Hybrid Agile Delivery Leads to Faster ROI
Our view is that RPA should leverage and recycle the best in class talent from agile and lean delivery methodologies. Assuming the right processes are selected up front, delivery teams will need flexibility to harvest quick wins and avoid getting bogged down in an attempt to automate 100% of each and every process. The real advantage of a hybrid agile approach to RPA is that it allows delivery teams to automate what they can from a process and bank the benefits quickly (thereby generating momentum and buy-in from the business). This also enables the team to work around process roadblocks, acknowledging that digitisation of inputs or more fundamental lean process redesign may be required before circling back for a second sweep of the remaining processes.6

While there are many potential organisational configurations, with varying levels of responsibility for business and RPA CoE, the key roles common in most instances include:

• Business Analyst: to evaluate and prioritise business processes for suitability for RPA, identify detailed requirements and re-design the automated process through a lean lens and supporting UAT.
• Developer / Configurer: To develop, configure and test the robots and associated scheduling and run-time routines including MI, conduct peer code reviews, deploy robots, oversee post live hyper-care, manage production support, incidents and change requests.
• Business SME: Provide business knowledge throughout the change delivery cycle, execute and sign off UAT and represent the process owner once the robot is in production. Technical Lead/Solution Architect: assume responsibility for robot design factors (portability, scalability, reusability etc), specify IT infrastructure requirements (environment, deployment model, etc).
• Project Manager: responsible for hybrid-agile day to day project management.
Standards and methodologies are critical for enterprise scale

Defining robust standards, conventions and methodologies from the start can pay huge dividends once a CoE scales.

Bot management is critical

Scheduling i.e. telling robots what to do and when to do tasks, is an intrinsic part of robotics. Optimising uptime of robotic resources is key to driving ROI.

On boarding digital resources

Each digital worker requires system log-ons and application licenses. Any organisation planning to “hire” robotic workers at scale needs to have considered the impact on their existing HR and risk procedures.

Digitised data provides fuel for intelligent and cognitive automation

The data outputted from RPA (process performance, exception logging, decision parameters) can provide input for intelligent and cognitive automation.
5. Technology and Data

5.1 Early Adoption - Starting with a Proof of Concept or a Proof of Value

Day zero in many organisations begins with a Proof of Concept (PoC) or Proof of Value (PoV). At first glance, the difference between these two proofs may seem superficial but the expected output can vary greatly. Where a PoC focuses on proving the theory that RPA is technically suitable in an organisation, usually via systems testing or automation of a sub-process, a PoV focuses on proving the business case for RPA. This can be done through an accelerated development period of a few weeks. As the developed process will not be used in production, time can be saved by omitting some UAT and documentation to focus instead on measuring ‘As Is’ (manual) vs ‘To Be’ process metrics and extrapolating the expected benefits. During this phase, it may also be possible to assess multiple vendor platforms and tools through what is known as a ‘bake-off’. This is where a shortlist of RPA vendor tools are chosen to develop the same process. Each vendor’s suitability, strengths and weaknesses can then be measured and assessed in an unbiased environment. PoCs and PoVs both provide a showcase for RPA within the organisation and facilitate a discussion with IT, Risk, HR and other key stakeholders based on more than theory and hypotheticals.11

5.2 Vendor Selection

While RPA is typically owned and driven by the business, a significant technical implementation is required to realise benefits. Initially, some vendors focussed on RPA core capabilities where high volume repetitive tasks have a clear set of rules and procedures with few exceptions to the rules. Over time, most products have evolved to allow easier integration with third party tools, APIs, cognitive capabilities and automation of front office tasks. While many solutions are still in the early stage of development, it is important for CoEs to nurture relationships with vendors and keep up to date with Beta and early access versions of product releases. RPA vendor solutions are marketed as allowing for quick development, deployment, and scaling of automated processes. GUIs allow employees with or without advanced programming experience to be trained and begin developing automations relatively quickly. Management and orchestration of automated tasks is efficient and transparent due to the queueing mechanism most vendors offer. This is critical for meeting SLA requirements and enabling effective integration with human workforces that are interlinked with, and depend on, automated processes.14

5.3 Supporting Technologies

In order to deploy virtual robots at scale, it is critical to utilise traditional technologies such as object orientated programming, SQL integration and scripting, automation of applications in a virtual environment, SMS integration and command line interfacing, and OCR which complements RPA technology.15

5.4 Scaling - Factors Affecting the Rate of Deployment

As an organisation’s RPA capability matures, we see a rapid increase in the rate of deployment of robotic processes into production. There are multiple reasons for this:

Design Principles: Firstly, the nature of most of the RPA vendor software is modular and object-oriented. This means that with good design, once off development work can be reused multiple times across different processes (e.g. automating the logging in to a core system which is used in multiple business processes across the organisation). As the CoE grows, so too does the library of objects that are available to developers, resulting in a quicker turnaround time in process development and change.

Methodologies: As RPA capability grows, we see substantial benefits in the development of standards, conventions and methodologies across the CoE from an early stage. This includes standards for development life cycles, coding and naming conventions, process documentation and testing. Defining robust standards, conventions and methodologies from the start can pay huge dividends once a CoE scales and reduces the level of retrospective change required.

Process selection: As an organisation becomes more familiar with the use of robotics as a tool of continuous improvement, the identification of processes which are good candidates for automation becomes more refined. The processes which produce the best ROI and business benefits can be identified more accurately by the business, speeding up the conveyor belt of processes into the RPA CoE queue of work.16

5.5 Managing Scalability

Process design: Designing a process for a single bot during a PoC/PoV phase can be deceptively straightforward; however, designing processes for a suite of bots requires great attention to detail so as to reduce potential conflicts and competition by the robots for resources.

Bot Management: Scheduling (telling robots what to do and when to do tasks) is an intrinsic part of robotics. Optimising uptime of robotic resources is key to driving ROI and bot scheduling is at the core of this. We have found that the scheduling of a suite of robotic resources can be very labour intensive and a tedious task at scale. Managing robotic resources during out-of-office hours also becomes an issue. We have seen some interesting takes on how to overcome this problem such as using a robotic resource to ‘manage’ a pool of other robotic resources by distributing workloads and prioritising work. The benefit here is a reduction in the human resource required to oversee and manage operations.
Digital Operational Excellence

Architecture: Architectural design is an influential factor in the scaling of RPA capability and can be a pain point when not given enough early thought. The roles of solution architect and database administrator are critical for designing and maintaining the back-end as well as managing the information produced by the robots. It is also important to have a clear delineation between development, test and production environments. Best practice within each of these areas should be well defined to reduce risk.  

Virtual users: Each robotic worker requires system log-ons and application licences just like an employee. Therefore, any organisation planning to “hire” robotic workers at scale needs to have considered the impact on existing processes. Questions to ask will include whether HR systems are set-up to recognise the particular features of the virtual employee in areas such as training, working hours and annual appraisals?

5.6 Orchestration of Multiple Technologies
Part of what makes robotics so flexible and agile is that the vendor software is like a workflow tool with a host of code objects that perform certain tasks and are not limited to the out of the box code. You can use different technologies for different tasks, and knowing which technologies work better in certain situations is an important aspect and skillset of the CoE. This becomes particularly interesting as we move into the cognitive field which relies heavily on statistical software such as R and Python to do computationally intensive analysis and number-crunching that can be easily controlled and orchestrated by robotics software. Similarly, we have seen frameworks like Angular or React used to create powerful user interfaces for robotic operations and management of resources. Many organisations have pieces of code, software and systems written for various functions by different developers. This kind of code debris (e.g. bespoke console apps, batch files, Python and JavaScript scripts, node and Java apps, SQL stored procedures and functions, Excel macros and various other pieces of bespoke code) written in a variety of languages over time can be amalgamated and orchestrated into a heavy duty workflow system.

5.7 Data and Management Information
Robotic and cognitive automated processes flow through a suite of technologies that provide comprehensive logging, performance metrics and an endless amount of data which enhances management information reporting. Data is captured from various viewpoints through vendor solutions that sit on top of traditional database architectures, facilitating data mining, data visualisation and communication through media forms such as web based dashboards, third party software, e-mail, SMS, PDF, and Excel reports. This provides clear metrics for areas such as FTE savings, business unit performance, and critical MI that can be reported to business stakeholders to support the effective management of their business units. Senior management and C-Suite members can see the benefits and financial performance of the CoE in relation to the rest of the enterprise. Clear and structured MI increases confidence in the CoE from the perspective of the business units that are dependent on RPA and also clears the path for further automation of processes.

Potentially, RPA data outputs can provide input for intelligent and cognitive automation through machine learning which relies on large datasets for the development of algorithms that mimic human cognitive capabilities. Exception logging, decision parameters and data of this nature may offer insight on how to scale into the realms of intelligent automation and artificial intelligence.

“..are HR systems set-up to recognise the particular features of the virtual employee?”

James Hunt
6. Conclusion

RPA has opened the door for the business to drive fast efficient agile change that can offer an attractive ROI. The market is still maturing and most firms are either at experimentation stage or getting to scale. The first wave of RPA CoE have been pioneers, leading the market in exploring how to design, deliver and run RPA at scale. Many lessons are available for the second wave to accelerate and de-risk similar journeys. The next few years will see a tipping point as delivery models and methods are refined and digital and cognitive tools become more accessible and easier to integrate. We see RPA maturing within a wider digital operational excellence offering which acknowledges that the fundamentals of process improvement remain unchanged — eliminate, simplify, standardise and automate. The digital workforce may still be at nursery stage, however, as with all things exponential we can be sure that the world will adopt robotic and cognitive technology in two ways, gradually at first, then suddenly.
End notes:

1. Unpublished survey results carried out by Deloitte with RPA CoEs in various client organisations.
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